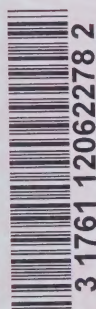


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Working Paper Series

FISCAL KNOWLEDGE AND PREFERENCES IN ONTARIO

Government
Publications

D. A. L. Auld

March 1977



Ontario Economic Council

Toronto, Ontario



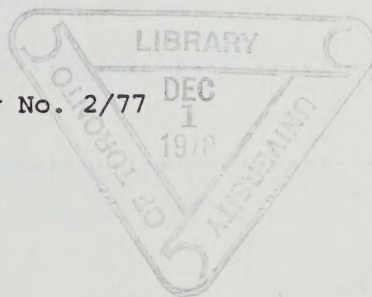
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This paper reflects the views of the author and not necessarily those of the Ontario Economic Council.

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I would like to thank Tom McCurdy and Jane Forster for the excellent work they did in assisting with this project. Thanks are also due to Albert Breton, Richard Bird and Douglas Hartle who commented upon the initial research design. Members of the staff of the Ontario Economic Council and the Department of Economics at the University of Guelph offered helpful comments at various stages of the research.

The survey instrument was prepared and executed by the Institute for Behavioral Research at York University, Toronto.

individual citizens and the public sector. It is only with considerably more information and knowledge that we will be in a position to debate the size and extent of interference with the private sector that government now occupies.

In the following analysis of private knowledge about and preferences for the public sector in Ontario, no attempt will be made to analyze or discuss in detail how information about fiscal preferences can and should be used in debate concerning the size of the public sector and its composition. Some comment on these issues is, however, inevitable. The objective of this study is much more positivistic. Answers are sought to questions that will assist in ascertaining how much people know about fiscal aspects of the Ontario public sector. The pattern of preferences for various categories of expenditure, in terms of individual desires for more or less spending will be determined. Furthermore, this position of preferences will be related to a set of personal characteristics to see if variations in preferences can be explained by these characteristics. In summary, then, our basic objective is to seek answers to a set of questions which will add to our understanding of private perceptions about the public sector in Ontario.

CHAPTER II

COLLECTIVE CHOICE & PRIVATE PREFERENCES:THEORETICAL AND EMPIRICAL ISSUESA. THEORETICAL ISSUES¹

The traditional theory concerning the optimal mix of private goods purchased by a consumer is founded on the premise that the consumer possesses considerable, if not perfect, information (which is costless) relating to the choice set. If information is not costless, the consumer will maximize his utility through a trade-off between the search cost associated with information assimilation and the probability of securing a higher quality /lower priced commodity. The individual reveals his preferences for private goods through the mix he chooses from the choice set.

The analysis is not, of course, the same for publicly-supplied goods and services. The individual does not face a variable choice set from which he can choose the mix of publicly-provided goods and services to satisfy his preferences. The budget constraint cannot be depicted as a series of relative prices between each public and private good. It is true that a consumer need not avail himself of the public goods which are provided but he cannot, in many cases, be excluded from or reject enjoying the benefits. The taxes paid are very real, and can be viewed as a reduction in the level of private goods consumption. Since

¹ For a more detailed analysis of the theoretical issues, see G. D. Hartle, (1976).

individuals cannot adjust the quantity of public goods they would desire to consume (in relation to their private goods consumption) and since their tax payment for public goods is invariant with preferences (with the exception of excise taxes) it can be argued that there is no incentive to seek information about the quantity and mix of public goods; both with respect to what is now being provided and what could be provided. Some relief, in terms of both the mix and level of taxes, can be achieved through mobility, if that option is available. (Tiebout, 1956).

This, however, ignores how the level and mix of public goods is arrived at and the role which individuals and their preferences play in the process of budget determination. Simply the mention of fiscal preferences raises the basic question: are they important to the whole question of budget determination and if so, why? It is true that we may wish to assess these preferences and analyze their similarity, diversity and intensity because we wish to know more about our society. The empirical evidence may be even more illuminating, however, when presented against a background of the theoretical approaches to fiscal choice. Although there are a variety of approaches to the theory of the public budget, we have compressed the various strands into four major themes; the 'pure' theory of public goods, the 'collective interest' approach, the vote maximization hypothesis and the individual utility approach.

The pure theory of public expenditure, in which the appropriate quantity of a public good is determined by the vertical summation of individual demand schedules, is largely identified with the writing of

Paul Samuelson. (1954)² To arrive at the efficient quantity of a public good (which, once made available to one person is available to all), this approach presumes that each individual in the collectivity reveals his true preference for the public good; that is, he reveals his willingness to pay for various quantities of the public good. In addition, the individual believes that once the quantity is provided, he will be 'charged' his willingness to pay for that quantity.

Although the Samuelson approach is theoretically elegant and has provided a wide range of insights into the theory of collective choice and optimal public budgets, it can be criticized (and has been) for its lack of realism in a world where the perfect revelation of fiscal preference is obviously impossible. In addition, the approach is centered about a unique polar class of goods, the 'pure' public good such as national defence. The role of government in such a world would be restricted to that of a computer, digesting the willingness to pay schedules of all persons, working out the cost schedule associated with each public good then sending out the tax bills in accordance with the fully informed, rational and truthfully-based demand schedules.

Politics, however, is not a computer and alternative approaches to the theory of budget determination (both in terms of the mix and size of the budget) have concentrated on the political process and political institutions. Such approaches do not preclude certain expenditures being classified as public goods. In fact, once outside the restrictive framework

²Samuelson is the seminal paper on the subject. For a more general, less technical statement of the 'pure theory', see Auld and Miller, (1975).

of 'pure' public good, a public good is simply one that is provided by government (though not necessarily produced by government) rather than through private markets even though it may possess the basic characteristics of a private good. One of these alternatives, which we shall label the 'collective interest' approach, is based on the premise that there exist certain national goals or collective desires which are not an aggregate of individual preferences but an expression of social objectives. Political institutions and basic political processes exist to carry out the public will and the collective interest approach is the study of how these are used to achieve the 'public' objectives. Another approach uses as its basic foundation the premise that the budget is the central focal point in the government's objective to maximize votes in the next election. As individuals maximize their utility through the choice of private goods, politicians maximize the probability of re-election by way of providing a mix of public goods. A third alternative to the restrictive pure theory of public goods is one we have labelled the individual utility approach, a line of reasoning and analysis that has been developed and refined by James Buchanan. His thesis is that individuals will try to maximize their own utility with respect to private and public goods and in the case of the latter, the analysis of public goods provision centers on how individual wants for such goods are translated into actual provision of the same.

COLLECTIVE INTEREST

There is no single theme in this approach. One interesting view is that although individual citizens have personal preferences for

the mix and size of the public budget just as they do for the bundle of private goods they consume, the former cannot be achieved in a manner similar to the latter: through individual purchases of goods in the market. The role of government is to go beyond the personal desires for public goods and identify (or formulate) a public need or will. This particular view is associated with Gerald Colm, (1955, 1965, 1966). Although his analysis of the problem of trying to formulate a public need appears to be detailed, it is not clear what is the ultimate basis for policy formulation. Nor is there any indication of a specific objective function that governments use as the foundation for policy. The approach is deficient in terms of any structure, but this itself may be a reflection of reality.

C. Lindblom, (1959, 1965) is considered by some to 'belong' to the collective interest group. (See Burkehead and Miner, 1971)

*Lindblom considers the ultimate objective of government to be the reconciliation of the diverse and often conflicting views that surround the formulation and execution of policy. The role that preferences for public goods and methods of financing their provision play in this framework is obvious; they either emerge during the process of reaching agreement or are sought out by public officials in order to find the common ground necessary to enact policy. If it is a question of eliciting preferences for some public policy, the policy can be introduced at a minimum level and from there, expanded as more information or 'feedback' is obtained about preferences, costs, etc. One obvious example might be medicare. To introduce a universal, comprehensive medical and hospital

insurance scheme would, in the absence of considerable foresight and knowledge of individual preferences, incur a greater probability of political suicide than would be the case where there was information on preferences. A more limited program would enable the government and citizens to see how the plan operates on a small scale and permit incremental expansions and alterations more in accordance with the preferences of the society.

The initial program must nevertheless be based on the belief that there exists some common value or consensus regarding the basic theme associated with the policy. It is the development of this theme over time, from budget to budget, that requires political expertise to gauge the common will with respect to the proposed development of the policy.

It is obvious that if the collective interest approach is the basis for budgetary policy and public goods provision, then individual preferences for such goods and the manner of financing them are not crucial in the original formulation of policy and the initial program. They will, however, be important for subsequent stages of the program's development and its long run structure. Preferences at the individual level will not be vital but the consensus (or lack of consensus) about a program, as reflected by groups whose feelings are similar will be critical. The dynamics of any public program cannot be controlled unless it is known how the interests of various groups coincide or conflict with the values embodied in the change of direction or magnitude of a program. This is especially true with respect to changing the magnitude

of a program since this may involve raising more public funds. Consequently, the government must not only be cognizant of society's attitudes toward the expansion of the program but also of attitudes towards alternative methods of financing the program.

All of this does not mean that the public bureaucracy is a passive institution which merely 'reacts' to generalized preferences which it might assess through cross section surveys of population samples. As already suggested, government may adopt a leadership role and mould preferences within the society so as to achieve a consensus about a budgetary program or legislative position. Even so, some knowledge on the part of government of the state of preferences must be assumed - even if it is the knowledge that there are no clear-cut or well-defined preferences on the part of citizens.

In the collective interest framework, the lack of any unique feeling on the part of any one person regarding specific policies, does not mean that there is no collective desire to 'do something' about certain needs that require collective action. The collective interest approach has, as a foundation, the existence of a public will or inherent collective wish for publicly-provided goods and services which are not just an aggregation of personal preferences. Public decisions are based on the existence of a common will which is either 'discovered' by the politicians or created through persuasion and example. In either instance, to sustain a viable democracy the politicians must be willing to consult a wide variety of sources to ascertain what public desires exist. Not only the direction of preferences but their intensities must be uncovered

if the dynamics of any program are to be properly engineered. In the absence of a leadership role on the part of government, the politicians must be able to reconcile diverse opinions, as much as possible. To lead, the politicians must know whose preferences are to be stimulated, dampened or redirected in accordance with the leadership's objective for the society.

In assuring that the collective interest of a political jurisdiction is fulfilled, the government does not translate individual preferences into a social welfare function. As we have seen, however, it must be aware (at least in a democratic state) what diversities and intensities in preferences exist. In this connection interest groups and 'lobbies' play an obvious role. Such a group if it is large can be viewed as an institution which privately coalesces the divergent strands of a common theme and expresses them as one viewpoint, usually directed at politicians. It acts to suppress particularly strong views of a few by making it obvious that to gain anything, a more general approach must be adopted.

Although interest groups and lobbies may view politicians as malleable, the latter can look upon these groups as signifying the diversity of preferences and their intensities. This is critical to the process of identifying a common interest or public will. Since there are obvious costs to belonging to an organization that is promoting a certain view, there is some truth that they do reflect intensities.

Without going into a lengthy survey of the literature on budget determination, let me summarize by starting the obvious: that the budget is determined by the government which is elected by the individual citizens.

Individuals can have an impact on the size and mix of the budget through voting for candidates, parties, referenda in accordance with their preferences. Within the framework suggested by Albert Breton (1974), the degree of political activity (including the search for information about public expenditure) depends among other things, on the difference between the actual provision of public goods and the individual, desired level and mix of public goods. Since the costs of political activity may be high in terms of foregone income or leisure, the "coercion threshold" (to use Breton's term) may have to be substantial; mild dissatisfaction will not provoke political activity. If politicians see themselves as leaders, with their own predetermined view of the collective will, the stand taken by interest groups will give them some idea of the amount of social manipulation necessary to achieve consensus on a policy.

The complexities associated with interest groups, private preferences and the role they play in budget structure are obvious. No attempt has been made here to explore these in detail, nor have we even discussed issues surrounding organization costs, potential gains and losses for groups and the control of groups. It is clear through, that without the existence of such institutions, the collective interest approach to budgetary policy would, in a democracy, be non-operational.

VOTE MAXIMIZATION

The process of budget determination is not a matter of implementing the public will but a calculated plan to maximize votes and keep politicians in office. This is a view that has been promoted by several writers

since the late nineteen fifties. In this setting, politicians carefully weigh the 'vote-getting' attractiveness of incremental expenditures against the loss of votes occasioned by the necessity to raise revenue by way of taxation and to lesser extent, bond finance. The major proponent at this theory, Anthony Downs (1957), sees the political group maximizing a very explicit objective function.

This approach offers very limited scope for political activity in terms of a leadership role. It also suggests that considerable knowledge of preferences is required to ensure that the policy is operational. There may be a good deal of agreement about having a new public program - provided it is financed by a particular tax. To introduce and pay for the program in the manner suggested by the preferences of let us say, the majority, is knowledge that is not easy to come by. With respect to paying for a given program, the vote-reduction aspect is as varied as there are ways of financing it. Because this may well be the critical element in the decision to go ahead with a program, considerable information on voter preferences towards taxation and borrowing will be required.

An efficient vote maximization process will obviously require gathering much information. Acting upon vague notions of what will get votes (and what will lose votes) could prove to be politically disastrous. Even information on the extent of awareness concerning the present budget and preferences towards its components would be helpful. How this information is obtained is, of course, part of politics.

INDIVIDUAL UTILITY APPROACH

The work of J. Buchanan (1960, 1967) and that of G. Tullock (1962), is a partial reconciliation of the pure theory of public goods and the collective interest approach. According to Buchanan, it is individuals who make fiscal choices, not politicians acting to carry out the public will. As Buchanan has stated:

"The approach taken here does not recognize the existence of such a 'public interest', and individuals are presumed to act simply as utility maximizers, although utility functions need not be narrowly defined."

The design of the Buchanan model is to demonstrate that despite the inoperative nature of the pure theory of public goods, the desire for public goods based on utility maximization is translated into the provision of public goods. It is not done by direct preference revelation; it employs the political market where politicians 'exchange' votes through the support of each other's projects to secure votes for their own projects. All of this is carried out through fiscal institutions and the nature of these along with their processes constitutes much of the analysis of Buchanan and Tullock. In the absence of institutions to provide public goods, preference revelation and trading lay the foundation for a collective-orientated agency. When there exist institutions to provide collective goods, individuals and groups pressure government to provide their wants

In conclusion, then, this brief survey suggests is that fiscal preferences are crucial to the basic theoretical approaches to the formation

of budget policy. How they are obtained and interpreted is an important part of the political process and since much of it may be through informal and personal contacts, little is known about the diversity and existence of preferences. Limited as it may be, a detailed and analytically sound survey of individuals may shed some light on what people's preferences are and the strength of their convictions.

Fiscal preferences are obviously important in policy formation since it is the distillation of these preferences that result in the composition and size of the budget. One of the jobs of a politician is to represent the feelings of his constituents in parliament concerning fiscal measures. Politicians also carefully assess the strength and scope of preferences as they are revealed through the media, political pressure groups and economic / social organizations. Since tastes or preferences for public goods and the relative mix of total public and private goods are obviously not homogeneous, one of the objectives in policy-making is to devise programs that have at least some common denominator that will appeal to a wide citizenry. In addition, the overall expenditure / tax package (and the mix therein) must not exclude an item which may have only narrow appeal but where there are very strong preferences.

PREFERENCE FORMATION

The final question to be discussed is how preferences are formed. Preferences for public goods are obviously based on (a) experience or learning (b) expectations and (c) extraneous information. People may be willing to support, for example, a new system of education based on

the expectations that their children will be better educated. Their support may be partly, or almost entirely based on what they hear and see about the new program from 'experts'. After experiencing the program, they may change their preferences if their expectations have not been met or they accept new information that it is not achieving what it was intended to. Fiscal preferences are obviously changing and the process must be considered a very dynamic system with a multiple of variables.

The experience / learning component of preference formulation is connected to the individual or family circumstances and what constitutes their personal satisfaction. A purely selfish individual in a high income bracket would, under a progressive taxation system, reject massive expenditures on day-care centres, free medical aid to the poor and free post-secondary education. His own life style would not find these of any direct benefit. Alternatively, someone with a high income could support such programs if he felt that the general welfare of the state was improved and that this in itself gave him satisfaction. The characteristics of an individual or family and the relationship to fiscal preferences will be discussed in more detail below.

The extent to which extraneous information is an important factor in determining preferences determines the malleability of preferences. Given the complexity of government activities and the pervasive interaction with the private sector, there is good reason to suspect that preferences are potentially more dependant today than in previous times on 'expert' information about public spending, taxation and its composition. We

include the word 'potential' because the actual acceptance of the extraneous information is likely to depend on the credibility of the person / agency dispensing the information and/or the logic underlying the arguments.

A well-reasoned editorial in The Globe and Mail arguing against free post-secondary education is likely to carry more 'preference generating' weight than an advertisement sponsored by an unknown organization stating that free education is morally wrong or bad.

B. EMPIRICAL ISSUES: MEASURING FISCAL PREFERENCES

The preceding discussion raises two basic questions: what does the individual know about the public sector and what are his/her attitudes towards various fiscal programs? With regard to the first issue, several studies on awareness of the fiscal sector have been undertaken the past decade and a half. (Enrick, 1963; Vogel, 1974; Strumpel, 1969; ACIR, 1974) Most of these have concentrated on taxpayer perception of average and marginal tax rates and how it relates to actual tax liability. Some have also involved attitudes towards taxation.

Empirical studies of the demand for public goods, or the measurement of fiscal preferences have generally followed three routes. The first of these is an examination of the pattern of public expenditure in a given jurisdiction and comparing this to the characteristics of the voting population in that political jurisdiction. The hypothesis, for example, is that the political process will supply public goods in keeping with the average or 'median' voter (in terms of his or her characteristics that can be tested. (Barr & Davis, 1966; Borcharding & Deacon, 1972)

A second approach such as that used by Banfield & Wilson (1965) and Shapiro & Deacon (1975) involves the analysis of referenda, a political approach has the advantage of obtaining an 'active' expression of preference compared to the examination of existing public expenditures which reflect past decisions.

The third approach (Mueller, 1963; Vogel, 1974 and Curtin & Cowan, 1973) involves interviewing a random sample of the potential voting population. In the absence of single referenda for each major category of public expenditure, such studies are useful in ascertaining contemporary fiscal preferences. This would appear to be an improvement over expenditure pattern studies which may well reflect historical preferences. The results may, of course, reflect feelings that have been 'generated' over previous years by what the government has done. Not only do they permit an examination of mean preferences but the variability of preferences across the spectrum of age, income and other voter characteristics. Ideally, one would like to have a series (every two years?) of surveys to determine the stability of preferences over time.

Sample surveys are not without their limitations, the major one being the question of whether or not true fiscal preferences are actually being expressed. First, there is the argument that at the time of conducting the interview, the individual's response is based upon greater ignorance (less knowledge) than would be the case at the time of an election. Secondly, there is the perennial problem of preference revelation in connection with the demand for public goods.³

³ Discussion of whether or not individuals will understate or overstate their true preferences goes back to Bowen, (1943). A more recent study

To a considerable extent, the analysis of fiscal preferences which follows has avoided these two problems. First of all, the interviews were carried out shortly after the presentation of the Ontario budget in May-June of 1975 and 3-4 months prior to a general election which at the time of the survey was believed to be going to take place even sooner. The political climate was one of an impending election and many politicians behaved accordingly which, simply translated, meant there was more than a usual amount of discussion about the budget and fiscal policies in general. Secondly, the interviews conducted did not seek to determine how much of a given public good individuals would be willing to purchase. Questions (See Appendix) were deliberately constructed to determine how an individual felt about the perceived level of expenditure in two cases, and in a third case they were asked about fiscal preferences in terms of the mix of a public goods after the actual breakdown was given to the respondent.

Certain general objectives of this study can be translated into specific hypotheses for the purpose of empirical testing. For example, because of the non-market nature of the provision of public goods and services discussed above, we would expect that individuals do not possess much knowledge about the broad macro aspects of the provincial budget. The cost of acquiring such information is not exceptionally high but

³ cont'd from page 17

by Kurz (1974), seeks to establish experimental methods of eliciting information associated with public goods preferences in such a manner that actual preferences are revealed. H. Hori (1975) has attempted to establish an operational model of public goods preference by examining the relationship between private and public goods. These latter approaches are still at the theoretical stage.

the return would be minimal except perhaps in cases where a person was on the 'verge' of taking political action.

In relation to voter characteristics, there is some expectation that upper income, more educated individuals will possess more information than the median voter in terms of these characteristics. Higher income persons are likely to be more affected by taxation and this could encourage interest in what is spent and where. In addition, we might expect higher educated persons to be more knowledgeable about fiscal matters.

Regarding fiscal preferences, hypothesis testing can be very complex since we can establish different sets of plausible behavioral assumptions that lead to different associations between fiscal preferences and voter characteristics. These potential associations will be made specific below; at this point it is perhaps sufficient to suggest some of the broad hypotheses that will be tested.

Incidence studies of the impact of the provincial budget on the distribution of income suggest that net fiscal benefits are first positive, then decline to zero and become negative as income rises. This pattern of incidence whether it is as reported or perceived to be as reported, suggests that in a self-interest utility maximizing framework, there would be growing resistance to government expenditure as income rises. Alternatively, since portions of the budget involve transfers from rich to poor, high income persons may consider this an improvement in their own utility if the satisfaction they get from knowing that others are better-off exceeds the tax-price they pay for redistribution. More generally, high income persons may feel they benefit indirectly from

an improvement in the social and economic climate due to redistribution.

Most outlays at the local level are on exhaustive expenditures, not transfer payments and only forty to fifty percent of the total is financed by property tax revenue. One might expect a different association between income levels and fiscal preferences here since tax liability declines proportionately as current income increases. With voter characteristics such as age, urban density and size of family, it is difficult to suggest any specific hypothesis with respect to total expenditure and characteristics. For specific items in the budget this is more feasible and they will be discussed in Chapter VI.

The analysis of fiscal preference orientation and fiscal awareness reported in Chapters IV to VII below is concerned largely with local and provincial public expenditures in Ontario. A total of 1294 individuals were interviewed using a sample design and interview plan developed by the Survey Research Centre at York University, Canada. A limited number of questions dealt with taxation in connection with the provision of public goods. The questionnaire and details of its design are found in Appendix.

Chapter IV presents the results of the survey in terms of basic levels of awareness about the public sector and overall fiscal preference orientation. Chapter V deals with the simple inter relationship between responses and characteristics of the sample through the use of contingency tables. The sixth chapter is an analysis of the data which attempts to reduce the number of variables in such a way as to analyze fiscal preferences in a more aggregated manner. Chapter VII reports the

results of our regression analysis. Two approaches were utilized in an attempt to determine the direction and strength of the relationship between fiscal preferences and the characteristics of the sample. In the first instance, the dependent variable was the coded response covering the range of insufficient to excessive expenditure on a given fiscal program. The second was a linear probability model where we tested the hypothesis that the probability of a persons stating spending on a given area was excessive (or insufficient) was a function of certain attributes of the respondent. The final chapter is a summary and interpretation of our results.

CHAPTER III

BASIC EMPIRICAL RESULTS

The first part of the analysis is a simple examination of the responses to questions on information about, and fiscal preferences towards local and provincial government spending (and taxes to a lesser extent) in Ontario. Subsequent analysis will be directed towards preferences and the characteristics of the respondents. Certain questions dealing with information and awareness will be analyzed in a similar manner.

Knowledge and Awareness of the Public Sector

Table 3.1 reveals that a substantial percentage of respondents had no idea (or were not willing to indicate they had) as to the size of the budget. Twenty-three percent of those who said they knew gave the correct answer. This represented 2.9 percent of the total sample. Details of these and other responses can be found in the Statistical Appendix, A3.1 to A3.5.

When respondents were asked to indicate the share of total provincial expenditure accounted for by social welfare and health, there was again a very large portion of the sample who stated they had no idea what the share was. Nineteen percent did answer the question concerning social welfare expenditure and twenty-six percent of those were correct. In the case of health spending, one-third of the twenty-four percent who gave an answer were correct. When it came to education expenditure, a slightly larger number of respondents (twenty-nine percent) stated they had a 'rough idea' as to the share of the budget allocated

TABLE 3.1

Summary of Basic Results Concerning Fiscal Awareness (detailed results are in Tables A3.1 to A3.5)

<u>Questions</u>	<u>Percentage of Total Sample Who Answered Correctly.</u>
Budget Size	2.9
Share of Budget for Welfare	4.9
Share of Budget for Health	8.0
Share of Budget for Education	7.3
Share of Total Local Spending Financed by Property Tax	5.0

to this area, and one quarter of them gave the correct answer. These results are recorded in Tables 3.1 and A3.2 to A3.4.

In order to gain some idea of awareness concerning provincial-local government fiscal arrangements, respondents were asked how they judged their understanding of such fiscal relations. Four percent said they understood the issue well; twenty-three percent replied moderately; forty-two percent replied only a little and almost a third said they did not understand provincial-local relations at all. In addition, respondents were asked if they had any idea as to the share of total local expenditure in their community that was financed by the property tax, the remainder being largely in the form of grants from the provincial government. Respondents were coded according to the size of their community and their estimate compared to the actual ratio of property tax revenue to local expenditure. Only 220 persons indicated that they had some idea of the ratio.

<u>Urban Size for Respondent</u>	<u>Actual Ratio of Property Tax Revenue to Local Spending *</u>	<u>Ratio Estimated by Respondent †</u>	<u>Percentage of Respondents Estimating Correctly (+ or -5%)</u>
0 - 100,000	.46	.20 (.14)**	17 %
100,000 - 1,000,000	.36	.37 (.21)	8 %
Toronto	.40	.31 (.20)	19 %

Source: * Ministry of Treasury, Economics and Intergovernmental Affairs,
1973 Municipal Financial Information.

** Standard deviation in brackets.

† Among those who gave an answer.

The percentage of the sample that 'guessed' correctly plus the standard deviation of the mean response are sufficient to suggest that there is

little knowledge in the population concerning this one aspect of inter-governmental fiscal relations.

To ascertain taxpayer's knowledge about the income tax burden they shoulder, respondents who replied they paid income tax in 1974 were asked to indicate what amount of income tax they actually paid. The following table shows what taxpayers, on average for each income group, perceived they paid and what on "average" was the actual tax paid.

Income Group (Total Income)	Perceived Tax Payment (Per Taxpayer)	Tax Payment (Per Taxpayer)*
under 5000	\$ 1205	\$ 160
5000 - 9999	1766	904
10000 - 14999	1893	2101
15000 - 19999	2522	3461
20000 +	3428	9346

Source:* Department of Treasury, Economics and Intergovernmental Affairs, Government of Ontario. These are estimates for 1974 based on actual 1973 data.

What we find is a substantial overestimate of tax paid for low income respondents and an equally substantial underestimate for those in the upper income group. Only in the "middle-income" group is there any similarity between perceived and actual taxes paid. It is true that our sample was not extremely large (630 respondents) and some of the difference can be attributed to sampling error. Nevertheless, the extremes that occur in the table above cannot be completely explained in this manner. Even if only \$20,000. to \$25,000. income earners were sampled in the last group, an average tax of \$3428. is certainly too low.

Either many respondents are (a) substantially misinformed about their tax burden or (b) they are deliberately concealing their knowledge about the tax burden, or (c) income is incorrectly reported in the survey.

Fiscal Preferences

Without being given any prior breakdown of local government expenditure, respondents were asked to state whether they felt that there was too much, too little or just sufficient spending on certain categories of local public expenditure. Responses were coded +1, -1 and 0 to indicate a feeling of excessive, insufficient and sufficient spending respectively. The mean scores and standard deviations are shown in Table 3.2. Detailed tables can be found in the statistical Appendix. The scores indicate that overall, there is a feeling that there is insufficient expenditure on streets, recreation and the protection of persons and property. Too much it was felt is being spent on local education and administration, the mean score on the latter indicating strong opposition to the 'perceived' present level of spending.

A similar fiscal preference measure was carried out for provincial expenditure, the results of which are also shown in Table 3.2. There appears to be a strong feeling that there is insufficient spending on anti-pollution and housing with similar feelings, but not as strong in terms of mean scores, concerning health and provincial policy expenditure. With respect to highways, community college and university expenditure, the scores suggest that expenditure levels are presently sufficient. Expenditure on administration, however, is deemed to be excessive.

At a later point in the interview, the respondent was given a percentage breakdown of total provincial expenditure. They were then

TABLE 3.2

Summary of Basic Results Concerning Fiscal Preferences
and Attitudes (detailed results in Tables A3.6 to A3.10.)

<u>Question</u>		<u>Mean Score and Standard Deviation</u>	
(a)	<u>Fiscal Preferences: Local Government</u>		
	streets and roads	-.360	(.522)
	recreation	-.330	(.453)
	police	-.201	(.303)
	fire	-.149	(.186)
	education (primary/secondary)	+.186	(.475)
	administration	+.615	(.323)
(b)	<u>Fiscal Preferences: Provincial Goods</u>		
	community college	+.048	(.541)
	university	+.038	(.581)
	anti-pollution	-.507	(.445)
	health	-.205	(.346)
	highways	-.001	(.389)
	housing	-.399	(.480)
	provincial police	-.169	(.244)
	administration	+.620	(.304)
(c)	<u>Percentage of Respondents who Felt They Were 'Getting Their Money's Worth' for (i) Property Tax Paid</u>	<u>Percentage</u> <u>Yes</u> <u>No</u>	
		53	39
	(ii) Provincial Tax Paid	45	38
(d)	<u>Percentage of Respondents Who Felt That the Standard of Living had been Improved by (i) Local Expenditure</u>	49	28
	(ii) Provincial Expenditure	58	20

asked to indicate whether or not a particular expenditure accounted for too much, too little or the correct share of the total. The results of this are shown in Table A3.8. Although the breakdown is not directly comparable to the expenditure areas in Table A3.7, some conclusions can be drawn from the two sets of results.⁴ In the area of health expenditure, the earlier preference for more expenditure on health is altered to one that suggests health spending, as a share of each tax dollar, is about right. The two results are not, of course, inconsistent since they could be interpreted as a feeling that the percentage spent on health is sufficient and that more should be spent in total. Or, once people saw how substantial the percentage was, they changed their mind and stated it was adequate. Although there was no significant feeling one way or another about total expenditure on community colleges and universities, the negative mean score in Table A3.8 suggests that as a share of total expenditure, this category is too low. Mean scores in the remaining expenditure categories do not suggest any strong preference in one direction or another. There is however, a strong feeling that expenditure in the last category which includes administration spending, is excessive.

The slight differences in responses connected with total spending and spending as a share of the budget may be interpreted as reflecting different things. Asking about shares, one is perhaps soliciting information on expenditures specifically while in discussions of total spending, an attitude toward a specific category may also incorporate a feeling about

⁴ The breakdown given to respondents for the results in Table 3.8 is found in the 1975 Ontario Budget. The earlier breakdown differs because of the desire to seek fiscal preference on items not separately broken-out in the budget break-down.

taxes, especially taxpayer resentment. The latter may also reflect 'popular' feeling (as expressed in the media) and its impact on preferences. Administrative spending and education are current examples of issues that were currently 'unpopular' prior to the survey.

Finally, to obtain a very general feeling about individual satisfaction with public expenditure and taxation, respondents were asked if they felt they were getting 'fair value' for the taxes they paid. The responses to this particular question indicate slightly more satisfaction with respect to the local as contrasted to the provincial public sector. One problem, though, is the fact that local property taxes only pay for a share of local spending; the remainder is financed by grants from the provincial government. Consequently local taxes paid fall short of benefits received (assumed to equal dollars spent) at the local level, while provincial spending 'benefits' fall short of provincial revenues collected. When asked if they felt public expenditures contributed to the overall increase in standard of living, provincial expenditure received more support than local spending, but not by much.

CHAPTER IV

ANALYSIS BY CONTINGENCY TABLES

The mean scores on fiscal preferences and the percentage response to questions concerning awareness about the public sector only paint a very broad picture of the public sector and how it is perceived. Much of the remaining analysis in this paper will be directed towards an understanding of this perception by examining determinants of information levels and fiscal preference orientation. This section will summarize the results of our initial exploratory investigation employing contingency table analysis.

Given a range of responses to a question and any one of the characteristics of the respondent, contingency tables are computed to allow a comparison between two response frequencies: the actual frequency and the frequency expected if responses were independent of the characteristic of the respondent.

The statistic to measure differences between the actual and expected frequencies is based on the chi-squared distribution. If the actual and expected frequencies are similar, the value of the chi-square statistic will be small, indicating independence between the response and the characteristic of the respondent. In effect, the chi-squared statistic tests for the null hypothesis (independence). Given the size of the contingency table, (the range of responses and characteristics of the respondents) and the level of significance desired, the chi-squared statistic is used to reject or accept the null hypothesis.

Knowledge and Awareness

The first five rows of Table 4.1 deal with 'yes' or 'no' responses to questions such as "Do you have a rough idea how much the Ontario Governments will spend in 1975?" In every case, the level of education is related to responses to these questions. The age of the respondent is another characteristic which appears related to the responses as well.

The responses of those answering 'yes' and subsequently giving an answer to the question in dollar or percentage terms were also examined to see if the correct answer was associated with some characteristic. The results are shown in Table 4.2. No detailed analysis is required to show that, given the categories here, there is little evidence to suggest that one category of income, age or education predominates the 'correct' reply.

There were also questions dealing with respondents' attitudes towards the 'value' they felt they received for their taxes and the contribution that public spending made to the overall standard of living. In Table 4.3 the chi-square statistic indicates the presence of interdependence between education level, age and family size to virtually all four questions. These questions are not, however, directly comparable. In some instances, a range of response was available while in others it was strictly 'yes' or 'no'.

Fiscal Preferences

Although mean scores on fiscal preferences give some idea of the general feeling towards various types of public expenditure, the dispersion

TABLE 4.1

CHI-SQUARE TESTS OF RELATIONSHIPS BETWEEN
EXPRESSIONS OF KNOWLEDGE AND RESPONDENT CHARACTERISTICS

	Age		Urban Density		Income		Family Size		Education	
Knowledge of Provincial - Local Fiscal Relationship	(n = 1294)	(n = 660)								
	16.73	15.81	17.78	12.03	17.01	24.82	24.88	32.47	77.74	82.79
	<u>19.46</u>	<u>18.45</u>	6.11	3.54	7.05	4.76	3.57	10.91	76.56	66.42
Knowledge of Share of Budget Allocated to Health										
	23.14	24.39	8.32	5.16	9.17	10.80	12.73	17.53	82.70	72.69
	<u>9.69</u>	4.54	<u>10.46</u>	<u>8.17</u>	5.84	5.36	13.50	7.31	23.42	20.01
Knowledge About the size of the Provincial Budget										
	20.65	13.50	7.73	2.24	.955	2.84	8.65	10.20	46.99	39.78
	<u>20.65</u>	<u>13.50</u>								

n = number of respondents analyzed.

Underlined values of the χ^2 statistic indicate rejection of the null hypothesis.

TABLE 4.2

PERCENTAGE OF RESPONDENTS FOR EACH CHARACTERISTIC GROUP
RESPONDING CORRECTLY

	Absolute Size of Budget	Share of Budget Allocated to Social Welfare	Share of Budget Allocated to Health	Share of Budget Allocated to Education
Urban Size				
<10,000	24%	9	35	19
10,000-100,000	50	25	20	11
CMA	24	26	29	25
Toronto	17	37	27	18
Income				
<5,000	21	18	30	27
5,000- 9,999	29	16	30	23
10,000-14,999	12	23	44	25
15,000-19,999	24	23	20	27
20,000 +	35	19	39	22
Family Size				
1	14	15	27	18
2	25	20	38	28
3	27	23	33	27
4	28	20	29	20
5	33	11	42	29
6	-	6	25	46
Education				
1	29	30	33	8
2	19	13	21	17
3	32	31	33	20
4	22	32	31	23
5	31	16	39	20
6	20	30	37	24
7	19	24	32	35

TABLE 4.3

CHI-SQUARE TESTS OF RELATIONSHIPS BETWEEN
GENERAL ATTITUDES TOWARDS THE PUBLIC SECTOR AND
RESPONDENT CHARACTERISTICS

	Age		Urban Density	Income	Family Size	Education
	(n=1294)	(n=660)				
Value of Provincial Expenditure Benefits for Taxes Paid	<u>47.10</u>	<u>41.36</u>	<u>16.68</u>	<u>23.72</u>	<u>47.35</u>	<u>42.88</u>
					<u>44.04</u>	<u>45.45</u>
Value of Local Expenditure Benefits for Property Tax Paid	<u>79.55</u>	<u>54.39</u>	<u>18.34</u>	<u>59.28</u>	<u>101.07</u>	<u>56.89</u>
					<u>67.24</u>	<u>14.87</u>
Contribution of Local Spending to Overall Living Standard	<u>16.16</u>	<u>11.40</u>	<u>17.63</u>	<u>15.29</u>	<u>34.43</u>	<u>46.70</u>
					<u>31.54</u>	<u>36.44</u>
Contribution of Pro- vincial Spending to Overall Living Standard	<u>18.06</u>	<u>13.70</u>	<u>20.67</u>	<u>25.31</u>	<u>22.04</u>	<u>67.48</u>
					<u>15.06</u>	<u>33.82</u>

around the mean indicates no unanimity concerning these expenditures. For any given type of expenditure, some respondents consider there is too much spent and some have the opposite feeling. In terms of the characteristics of the respondents, is there any pattern associated with the expressed fiscal preferences?

As a first approximation to gaining some understanding about the relationship between fiscal preferences and respondent characteristics, contingency tables were computed for all fiscal preference variables and the five basic characteristics of the sample: age, education, income, urban size and family size.

Table 4.4 presents the calculated chi-squared statistic for contingency tables involving 15 fiscal areas of public spending and the five basic characteristics of the sample. These were carried out for all respondents ($n = 1294$) and a subset ($n = 660$), the subset being those persons who earned income in 1974.

It is rather difficult to summarize the results in Table 4.4. The underlined values of the calculated chi-squared indicate that the null hypothesis (independence between fiscal preferences and the particular characteristic) must be rejected.

Starting with the entire sample ($n = 1294$), provincial highways expenditure, provincial police and university expenditure are the three expenditure areas where there is interdependence between preference expression and all characteristics of the sample. Health spending preference is related to four of the characteristics while local recreation, local administration, community colleges, anti-pollution, housing and provincial administration, are areas of spending where there is evidence of interdependence with three of the sample characteristics. The null

TABLE 4.4

CHI-SQUARE TESTS OF RELATIONSHIP BETWEEN
FISCAL PREFERENCE AND RESPONDENT CHARACTERISTICS

	Age (n=1294)	Urban Density (n=1294)	Income (n=1294)	Family Size (n=1294)	Education (n=1294)			
Social Welfare Payments	10.58	13.64	14.99	14.57	16.26	10.58	18.08	17.81
Local Streets	10.13	8.78	33.46	15.17	18.01	22.71	19.49	24.28
Recreation	29.02	21.33	17.35	22.75	50.98	19.32	27.63	29.78
Police Protection	12.47	7.62	21.29	22.00	24.73	21.27	15.55	16.38
Fire Protection	9.32	6.20	39.17	26.12	18.69	17.50	44.70	23.36
Education	35.75	17.53	18.00	13.03	41.40	16.10	40.71	21.51
Administration	14.69	20.64	29.83	20.77	23.83	22.67	45.31	35.38
Community Colleges	72.02	50.78	11.22	13.32	37.45	27.06	74.74	46.25
Universities	48.92	33.08	24.87	25.44	41.27	23.47	97.90	68.09
Anti-Pollution	46.13	27.35	23.58	22.17	33.05	29.24	73.14	35.36
Health	25.91	28.08	30.41	23.66	42.47	31.10	74.28	61.16
Highways	44.78	47.70	35.44	27.26	46.89	56.75	47.49	46.68
Housing	29.91	29.46	20.21	20.46	41.01	38.74	52.84	30.50
Provincial Police	26.35	21.13	22.30	11.77	64.40	50.51	52.52	56.19
Prov. Administration	16.95	17.95	44.47	33.54	32.24	29.80	103.72	76.76

Value of chi-squared
for appropriate degrees
of freedom (95 percent
significance level)

21.06

16.91

21.06

40.11

41.33

36.

hypothesis is rejected in the case of local fire protection and local education spending with respect to two of the characteristics. There may be some relationship between local police protection and income, and there is no evidence of any interdependence for provincial social welfare spending.

There are fourteen cases where a rejected null hypothesis based on the entire sample is accepted when the subset of the sample (those earning income) is analyzed. There is one case where the reverse occurs. It is most prevalent in the case of family size where the null hypothesis is accepted for the subset with reference to recreation, primary and secondary education, community colleges, university and health expenditure. Similar changes occur for the income, age and the urban density characteristic. What this implies is that in these fourteen cases, the fiscal preferences of the non-income earning respondents are sufficiently related to certain characteristics to 'overturn' the independence that exists for the income-earning respondents even though these relationships are weak. The direction and magnitude of this will be examined in the regression analysis in Section VI.

In summary, the contingency table analysis reveals the existence of interdependence between fiscal preferences and respondent characteristics but no interdependence in the case of fiscal knowledge or awareness. This suggests that with respect to the desire for more or less public expenditure in a given area there may indeed exist particular interest groups characterized by such features as age, family size and income.

CHAPTER V

FACTOR ANALYSIS

In the presence of a number of variables associated with a single subject, factor analysis provides one method of determining the existence of a grouping or clustering of variables which may have some social, economic or political interpretation. Furthermore, it may allow the construction of new, composite variables which reflect orientation towards particular areas and can therefore be used as dependent variables in regression analysis. (Rummel, 1967; 1970)

The first task in factor analysis is choosing a set of relevant variables. The set chosen here consisted of those variables representing the respondent's preferences for a variety of local and provincial public goods and services. A number of techniques are available for factor analysis and for our purposes, we chose the principal factoring with iteration (PA2) and oblique rotation. The difference between an iterative and non-iterative approach is subtle but essentially allows for the correlation of one variable with all other variables to be taken into account when the program searches for successive factors. Oblique rotation of a factor pattern matrix to a terminal solution was chosen since it does not constrain the factors orthogonally.

Table A5.1 is the resulting factor pattern matrix (rotated) involving fifteen public goods and services. Factor 1 is associated strongly

with post-secondary education which is labelled as higher education preference. Factor 2, is labelled protection of persons and property as it loads heavily on local police and fire protection as well as provincial police. Factor 3 is associated with public expenditure on administration at both levels of government. The fourth factor has its heaviest loadings on local and provincial transportation facilities while the fifth is associated with the 'soft' services of social welfare, local education and health. The last factor, which we have labelled personal environment loads on preferences for anti-pollution and housing.

In a subsequent analysis, the set of preferences (for provincial public expenditure) is replaced by the variables representing preferences after respondents had been shown the actual breakdown of total provincial expenditure into various areas. It was felt that if respondents attitudes altered significantly after they were aware of the provincial expenditure breakdown, it would affect the factor loadings. The results are displayed in Table A5.2. Factors 1 and 2 are similar in loadings but factor three loads heavily on social welfare and community services at the provincial level. The loadings on factors 4 and 5 do not lend themselves to any particular "common" denominator.

From the factor pattern, it is possible to create a new 'scale' or variable which is a composite of the loadings in each factor. These scales are then regressed on the characteristics of the respondents to measure the possible relationship between the composite variable or 'scale' and these characteristics. The results are recorded in Table 5.1.

The regression coefficients cannot, however, be used for a basis of comparison among explanatory variables due to the fact that different units of measurement have been used. To overcome this problem, the β -coefficients (standardized partial regression coefficients) have been computed and recorded in the Table as well as the original coefficients and their standard errors.

If we look for the two most important explanatory variables for each scale, the following emerges.

<u>Scale</u>	<u>Explanatory Variable</u>
1	education; residency
2	income; family size
3	education; age
4	age; family size
5	education; age
6	age; education.

Both education and age occur frequently as the most or second-most important characteristic variable explaining the variance in the scale variables. The direction of these relationships is seen in Table 5.1. The results do not indicate much in the way of a broad, consistent pattern of preferences. A few interesting results, however, do occur. Higher educated people feel that expenditure on post-secondary education is excessive; why? Do they feel that the social benefits are small or that they themselves did not gain from their experience (those who attended post secondary institutions)? The higher the income, the greater the tendency to view 'protection' expenditures as excessive, suggesting that this is an inferior good. Older people feel that such expenditure is deficient, reflecting, perhaps an increasing demand for security.

TABLE 5.1

REGRESSION OF SCALES FROM FACTOR PATTERN (SEE A5.1) ON RESPONDENT CHARACTERISTICS

DEPENDENT VARIABLE	INDEPENDENT VARIABLES*						
	Education	Urban Group Size	Income Group	Family Size	Age	Residency	R ²
SCALE 1 (coll.&univ)	.233 .149** (.067)	.047 .021 (.092)	-.052 .022 (.099)	-.060 .032 (.075)	-.078 .025 (.129)	-.397 .058 (.259)	.16
SCALE 2 (protection)	-.062 .024 (.107)	.033 .001 (.148)	.325 .086 (.161)	.252 .082 (.122)	-.585 .114 (.209)	-.371 .034 (.419)	.18
SCALE 3 (administration)	-.270 .132 (.087)	.042 .014 (.121)	-.166 .054 (.131)	-.079 .032 (.099)	.292 .070 (.170)	.627 .070 (.343)	.19
SCALE 4 (streets,hwy)	-.015 .012 (.054)	.008 .004 (.076)	-.112 .058 (.082)	-.171 .110 (.062)	.347 .134 (.106)	.081 .014 (.213)	.21
SCALE 5 (soc.welfare educ,health)	.176 .131 (.056)	.104 .053 (.079)	.055 .027 (.085)	.108 .066 (.065)	-.242 .089 (.110)	-.130 .022 (.221)	.21
SCALE 6 (hous./environ.)	-.075 .081 (.039)	.004 .003 (.054)	-.016 .011 (.059)	-.025 .022 (.045)	.199 .107 (.077)	.012 .003 (.153)	.16

* Standard errors are in brackets below estimated coefficient.

** Standardized partial coefficients or Beta values.

CHAPTER VI

REGRESSION ANALYSIS

(a) SIMPLE LINEAR REGRESSION

In order to determine more precisely the relationship between fiscal preferences and the characteristics of the respondents, a simple linear regression analysis was carried out on the data associated with expressed preferences for provincial and local public goods.

It will be recalled that respondent preferences were coded +1, 0, -1, depending on whether they felt there was excessive, sufficient or insufficient expenditure on each of several expenditure categories. These values were then used as the regressands in the various equations. The independent variables or potential predictors of fiscal preferences were the characteristics of the respondents in the sample.

The first predictor considered was urban size or the population of the locality where a respondent resides. Each respondent was placed in one of four urban size groups; less than 10,000, 10,000 to 100,000, 100,000 to 1,000,000 and over 1,000,000. This latter category is, of course, one city, Toronto. At the local level, the relationship between urban size and fiscal preference orientation is hard to judge ex ante. Expenditure on roads, recreation, protection and education could be either negatively or positively correlated with expressed preferences because of the possibility of considerable variation in per capita spending in each of these categories. For provincial expenditure, where the categories of expenditure include housing, anti-pollution and transportation, one can make a case for a negative correlation with urban size if per capita spending for these areas is constant or varies little across urban areas.

The general tendency for urban size to be related to high land values, increased pollution and traffic congestion suggests that this would be the case.⁵

The units of measure for the second predictor were five income groups ranging from no income to \$20,000 or more. Here again expectations about the correlation with fiscal preferences are difficult to make. As noted in Section 1, a great deal depends upon one's assumption concerning the incidence of expenditures and whether or not people are 'self-interest' orientated or more altruistic.

With respect to family size, we might expect a negative correlation with such fiscal variables as public recreation facilities and education if parents with large families are looking for a greater variety and perhaps better quality of recreation and education services. In addition, large families imply that for a given family income, there is less family income per child for private recreation and education.

When it comes to age, expectations about fiscal preferences as one becomes older would in part depend upon the age distribution of benefit incidence. At the local level, education expenditure becomes less important once children have left the home and consequently one might expect a negative correlation here. Protection of persons and property (police and fire) could be considered more important as age increases due to a persons accumulation of wealth over a lifetime and apprehension

⁵ Unfortunately there is no data on per capita expenditure by the province in these areas on the basis of urban size. A negative correlation could be interpreted, in part, as a reflection of insufficient expenditure to meet increasing needs.

concerning self-protection. At the provincial level, a similar argument could be applied to higher education and police. Housing will not be important for those who now, in later life, own a home but would be for those who are retiring and have to rent. Finally, older persons may 'recall' that in the past, government spending (and taxes) were considerably lower and unless they have experienced an increase in public benefits commensurate with taxes they have paid, they may have a negative attitude about government spending in general.

The education variable is extremely difficult to analyze with respect to what one would expect the correlations to be. High correlations of education and income may tend to distort the relationship between fiscal preference and education and we will comment on this later. It is not clear that as education levels fall, there is a tendency for persons to be more in favour or less in favour of expenditure on any given category of expenditure.

The set of responses dealing with expenditure preferences were divided into two subsets providing three sets of data for analysis. The first subset of the sample included only those respondents who earned income in 1974 while the second subset of respondents were non-income recipients. It was felt that the attitudes of those who earned income and paid taxes directly in the form of personal income tax may differ noticeably from those who earned no income and paid no income tax. Although income recipients may be ignorant in varying degrees as to what level of taxes they pay, they are at least aware (or moreso than non-income recipients) that there is a tax price associated with the consumption of public goods.

Since the five independent variables are not measured in similar units, we have estimated the beta coefficients (β) corresponding to the estimated regression coefficients (\hat{B}) in each equation. The statistical appendix includes all those estimated coefficients which are significant at at least a 90 percent level of confidence. One problem with this method of analysis is the -1, 0, +1 value of the regressand. A negative correlation between a preference score and characteristic may fall in the -1, 0 range, 0, +1 range or the entire -1, +1 range. For example, a negative correlation between preference for education spending and income could result from high income persons scoring -1 and the low income persons scoring 0. Or, it could result from high income persons scoring 0 and low income persons scoring +1. Finally, it could result from high income persons scoring -1, middle income respondents scoring 0 and low income respondents scoring +1. In the first instance, the higher the income, the tendency to feel that spending goes from sufficient to insufficient. In the third instance, the tendency is for preferences to go from excessive spending to insufficient spending as income rises. The coefficient signs are best interpreted as perceptions toward excessive or insufficient expenditure.

Total Sets of Respondents

The results of the regression analysis using the set "All Respondents" and fiscal preferences for local public spending are given in Table A6.1 in the Statistical Appendix. The size of the community in which respondents live is the most frequent significant predictor. Income, family size and age are predictors in three of the six local expenditure categories. As the size of the urban area in which a respondent lives increases, there is a tendency to view expenditure as excessive, with the exception of local education

where the trend is the reverse. A positive relationship between income and preference is significant in three instances. There is quite a significant negative relationship between recreation preferences and family size as expected and a weaker but similar pattern with respect to local education.

When fiscal preferences for provincial public goods are examined, age and urban size are highly frequent predictors with income and education being less important, although once again the adjusted R^2 indicate a low total explanation of the variance. (See Table A6-2) Only with the age predictor is the pattern consistent; older respondents expressing their preference for less public expenditure at the provincial level with the exception of police. With urban size as the explanatory variable, persons in large communities feel there is insufficient expenditure on higher education, police, anti-pollution programs and housing but too much on highways, and administration. Interestingly, the higher the education level, the less the tendency to view administration expenditure as excessive.

Expenditure on higher education, which has been the subject of budget cutbacks, tends to be thought of as excessive (or goes from an insufficient to a satisfactory level of spending) as both income and age increase. The reverse is true for the urban size and family size variable.

Turning to the expression of fiscal preferences after respondents are aware of the breakdown of the budget, (Table A6.3) some mildly startling results are obtained. Whereas income and age were positively correlated with the preference score for higher education, they are negatively correlated when respondents were asked to state their preference after being made aware of the composition of the budget. There are several reasons as to why this might occur, two of which appear to be the most

important. First of all, higher income and older respondents may feel that too much is spent on higher education because government spending overall is too high. As a share of what is spent, they may feel that the present share is insufficient. Alternatively it may be a response based on awareness that higher education spending is not as large a share of the budget as was previously believed and therefore not really excessive. One could interpret this as the impact of new information on preferences since the analysis of fiscal knowledge revealed considerable ignorance about budget shares.

Non-Income Recipients

The first subset of respondents analyzed was composed of non-income recipients. The most frequent significant predictors were urban size and education. (See Table A6.4) In two cases, the larger the urban community in which the respondent lives, the greater the tendency to view spending as excessive. With police protection, the opposite occurs. Education is inversely related to fiscal preferences in three instances. Interestingly, education was not a significant predictor when all respondents are in the sample. Non-income respondents also appear to feel there is insufficient expenditure on recreation, the larger the family unit they are associated with.

For provincial expenditure, (See Table A.6.5) age predominates as the most frequent predictor. In all instances except police expenditure, there is a tendency for increased age to be associated with excessive expenditure. This category of expenditures is also inversely correlated with urban size and family size. There is a weak and negative association between education and university expenditure. When the total sample is compared with the non-income subset, the only reversals are with respect to age and anti-pollution. In the total sample, increased age is associated with insufficient spending in this area whereas in the subset the reverse occurs.

When respondents were asked about their preferences regarding budget shares, after the breakdown of provincial expenditure is made available, (See Table A6.6) age remains as the main predictor. Where direct comparisons are possible, (health and higher education), we find a reverse (in contrast to absolute spending levels) in the correlations with respect to age. This also occurred for the total sample and possible reasons for this were discussed above. The feeling of insufficient expenditures appear to occur in larger urban areas and where the respondent is a member of a large family. The first is to some extent predictable, the second is not so clear.

Income Recipient Respondents

Table A6.7 records the results of simple linear regression involving the fiscal preferences of those who earned income in 1974. What is noticeable first is the small percentage of variance in the dependent variable explained by the independent variables. Urban size is the predictor that is most frequently significant and an interesting feature about this predictor is that the coefficient is positive. Other factors held constant, persons in larger urban centers tend to view four of the six categories of local spending as excessive. In some instances, family size and education reinforce this and in others, the opposite occurs. Only in the case of fire protection and administration do we have three significant predictors.⁶

For provincial expenditure preferences, (See Table A6.8) the adjusted \bar{R}^2 are again low indicating that only a small proportion of the

⁶ Simple correlation coefficients between income and age; income and education; income and urban size are 0.240, 0.378 and 0.349 respectively.

variance in preferences is explained by the predictors. Nevertheless, a number of predictors are significant although several only marginally. Age is the most frequently significant predictor and has a relatively high level of significance attached to it.

Between the two subsets, there are a few differences. For income recipients, age is barely significantly (and negatively) associated with health spending whereas for the non-income recipients, there is a highly significant (and positive) association. In short, older, non-income recipients tend to view health expenditure as excessive which may seem unusual since this group is likely to comprise older, non-income receiving women and retired people. For housing, family size is negatively correlated with fiscal preferences for income-earning respondents and positively correlated for non-earners. This latter group would comprise a number of non-income recipients (housewives) and retired persons and their feelings concerning excessive spending on housing is likely due to (a) the fact they own their home or (b) the family income is sufficiently high that housing is not a problem. The opposite association between age and expenditure is true for expenditure on provincial police.

Turning to the analysis of preferences when respondents are aware of the budget's breakdown, the explained variance is again low. (See Table A6.9) For higher education spending, the direction of causation between preference and age changes when we go from preferences for spending (no prior information) and the results when the breakdown of spending is given. A similar "switch" occurs for health expenditure preferences.

SUMMARY

It is difficult to summarize all these results and draw meaningful conclusions from them as a large number of predictors are only marginally significant. If we exclude all variables below a 95% confidence level, the following summary can be drawn up. (See Table 6.1).

For local expenditure, urban size is the most frequently significant variable at a 95 percent confidence level. Looking at all the respondent characteristics which are significant, the majority of these predictors are related to the view that expenditure is excessive. Regarding provincial spending, age is the predominant significant predictor of fiscal preference with a general tendency for older respondents to view expenditures as excessive. Urban size is again a frequent significant predictor but the correlation between this predictor and fiscal preference is more often negative, suggesting a feeling of insufficient spending by those in larger communities.

Turning to preferences with respect to share of total provincial expenditure allocated to various areas, age and education are the major significant predictors. Interestingly, as education of the respondent increases, there is an increasing feeling that an insufficient share of the budget is being devoted to higher education.

(b) LINEAR PROBABILITY FUNCTION

Given the very limited nature of the dependent variable in our analysis of fiscal preferences, it is possible to interpret a fiscal preference in terms of probabilities. For example, either a person expresses a preference that expenditures is excessive or that it is insufficient or

TABLE 6.1

DIRECTION OF CAUSATION BETWEEN FISCAL PREFERENCES AND CHARACTERISTICS

FOR ALL CHARACTERISTICS SIGNIFICANT AT 95 PERCENT LEVEL

Dependent Variable	URBAN SIZE		INCOME		FAMILY SIZE		AGE		EDUCATION	
	Tot.	Sam. Non-In. Inc.	Tot.	Sam. Non-In. Inc.	Tot.	Sam. Non-In. Inc.	Tot.	Sam. Non-In. Inc.	Tot.	Sam. Non-In. Inc.
street	+	+			-					
recreat.	+	+					-			
polc.		-								
fire			+				+		+	
educ.	+	+								
admin.							+	+		
comm, col.	-				-		+	+		
univ.					-					
pollut.							+	+		
health	+	+							+	
highw.	-	-					+			
hous	-	-								
pr.pol										
admin.			+				-		+	
health										
ed.	+								-	
univ./cc										
goc/comm.							-	-		+
transp.									-	-
transf.	-									
other(ad)										

satisfactory. It is possible then to treat this as a binary dependent variable where

$$\begin{aligned} f_1 &= 1 \text{ if expenditure is deemed excessive} \\ &0 \text{ if it is not deemed so.} \\ f_2 &= 1 \text{ if expenditure is deemed insufficient} \\ &0 \text{ if it is not deemed so.} \end{aligned}$$

It is then assumed that the expected value of f_1 or f_2 is a linear function of the respondent characteristics. Since f_1 (or f_2) is binary (0 or 1), the conditional expectation of the f_1 or f_2 , given the respondent characteristics, is the probability that the outcome will take place for given characteristics. (Goldberger, 1963)

In the first set of regressions, the dependent variable was the probability that the respondent felt that expenditure on a given category was insufficient. The results are reported in Tables A6.10 and A6.11. The most noticeable result is the low \bar{R}^2 in all equations. Nevertheless, there were some significant predictors. For example, urban size is a significant predictor of the probability that local expenditure on streets is insufficient. Income is a good predictor of the probability that expenditure on fire protection is insufficient. Age is a strong predictor of the probability that expenditure on police protection is insufficient.

At the local level, the following tendencies regarding fiscal preferences emerge;

- a) The probability that a person feels that street and road expenditure is insufficient decreases with the size of the community a person lives in.

- b) For recreational facilities, the results suggest that younger people in smaller communities are more likely to view such expenditure as insufficient.
- c) Regarding police expenditure, there is an increasing probability that older people in large communities feel that it is insufficient as do those with those on high incomes.
- d) The probability that fire protection expenditure is viewed as insufficient decreases with education and income.
- e) Local education spending tends to be viewed as insufficient by young, more formally educated persons in larger communities.
- f) As far as administration is concerned, the size of the community of the respondent is negatively correlated with the probability that spending is insufficient suggesting that a feeling of insufficient spending exists to a greater extent in small communities.

If we reformulate the problem in terms of the probability that spending is excessive, the results confirm the previous tests with the exception of income and police expenditure. (See Tables A6.12 and A6.13) It was suggested above that police expenditure tends to be viewed as insufficient by low income persons whereas in the reformulation, excessive expenditure is also related to low income persons. This is likely to result from the fact that the relationship between income and fiscal preference for this area of expenditure is non-linear, and in fact may be hyperbolic over the entire range. The two tests are, therefore, "picking-up" a different segment of the distribution of responses. The other

interesting result from the second test is the relationship between family size and recreation spending. As suggested earlier the probability that such expenditure is excessive increases as the age of the family decreases.

For provincial expenditure, the overall \bar{R}^2 are again low but there are a greater number of significant predictors. In five out of six cases where urban size is significant, the probability that a respondent feels that expenditure is insufficient rises with the size of the community. In seven out of eight cases it declines with increasing age. The standardized partial correlation coefficients gives an indication of the relative importance of the predictors and from these the following general observations can be made.

- a) Age dominates as a negative predictor of the probability that higher education spending is insufficient.
- b) Education and age dominate in the case of health expenditure preferences.
- c) Urban size is the dominant predictor (in a positive direction) for the probability of insufficient highway expenditure, as it does for housing as well.
- d) In the case of provincial police, urban size and income dominate as predictors of the probability that expenditure is excessive but in opposite directions.

When the problem is reformulated in terms of the probability of excessive expenditure, the results (Table A6.13) confirm the first set of tests although several of the significant predictors "drop-out" in the second round.

TABLE 6.2

SUMMARY OF LINEAR PROBABILITY MODELS: ALL EXPLANATORY VARIABLES SIGNIFICANT AT 95% LEVEL.

Independent Variable	Urban Size		Income		Family Size		Age		Education		Residency	
	P(Ex)	P(Ins)	P(Ex)	P(Ins)	P(Ex)	P(Ins)	P(Ex)	P(Ins)	P(Ex)	P(Ins)	P(Ex)	P(Ins)
streets	+	-										
recreat.	+				-							
polc.			-				+	+				
fire				-								
educ.					-		+	-				
admin.	+	-	+				+	-				
comm. col.		+			-	+	+	-			+	
univ.			+			+		-				
pollut.								-				
health								-	+	-	+	
highw.	+	-						-				
hous.		+						-				
pr. pol.		+		-			-	+				
admin.	+		+			-		-	+			

To summarize, a table (6.2) similar to 6.1 is constructed recording the direction of causation between the dependent and independent variables in those cases where the estimated coefficient is significant at at least a 95 percent level of confidence. The results confirm our earlier analysis that age and the size of the community a person resides in are the most important predictors of fiscal preferences.

CHAPTER VII
SUMMARY AND CONCLUSION

The investigation of fiscal awareness or knowledge in this study was limited to:

(a) the macro aspects of the provincial budget (its size and basic composition in terms of the share of total spending accounted for by major functional areas)

(b) one aspect of provincial-local fiscal relations,

(c) personal income tax burdens.

No attempt was made to determine if individuals were aware of the existence of programs (e.g., housing subsidies) or how they operated. In all three instances, it was discovered that there was considerable ignorance. Furthermore, there was very little relationship between correct answers and the characteristics of the respondents.

The question that immediately comes to mind is whether or not such lack of knowledge really matters. What difference would it make to decision-making, both by individuals and the government, if individuals were highly knowledgeable on the above and other aspects of the budget in Ontario?

In the case of the absolute size of the budget, it probably makes little difference whether people think it is \$8B or \$10B. Figures of these magnitudes are likely to mean very little to most persons. In terms of public debate concerning the size of the public sector, it would probably be more appropriate to consider the growth of the budget over time or the ratio of public spending to some benchmark such as gross

national product. When it come to budget shares covering major categories of spending such as health, education and social welfare, it becomes more important that people be aware of what these shares are if they are to meaningfully evaluate discussion and proposals for changing priorities in government spending.

Knowledge concerning the extent to which local public spending is financed by the provincial government is also important. Without a basic understanding of what the fiscal relationship is, it is virtually impossible to realistically evaluate the tax price one pays for local public goods.

As for personal tax burdens, substantial divergences between what people actually pay and what they think they pay may produce fiscal attitudes which, with complete (or accurate information) would be different. Since most Ontario income-receiving residents complete a tax return, they are aware, at one point in time at least, what their tax burden is. The results in this study suggest either a lack of willingness on the part of individuals to reveal what their tax burden is and/or forgetfulness.

It was suggested in Chapter 1 that there is little incentive for individuals to seek out information about such issues as budget shares and intergovernmental fiscal relations. They may of course be stimulated to do such if they are directly attempting to influence the outcome of an election. Even then, if the cost of searching for knowledge about the public sector are high, individuals are likely to make their decisions on what they perceive, not what is actually true. The evidence here on fiscal awareness suggests that the provision of additional information about the

provincial public sector could improve the individual's knowledge about this sector of the economy. This could be done through educational facilities or by government itself through the audio-visual media. There are those who would argue that public 'advertising' is a waste of taxpayers' money and politically unfair to opposition parties.

There is some truthfulness to this assertion. Like other forms of information transmission, there is scope for distortion and the promotion of misleading facts. Effective safeguards could, however, be established to prevent most instances of this kind. To do nothing about this problem of limited knowledge is to condone a situation which is not exactly healthy for the process of budget determination.

Fiscal Preferences

The analysis of attitudes towards fiscal programs show that there is a feeling suggesting insufficient expenditure on certain local and provincial goods. This does not mean however, that there is support for expanding the public sector: a re-organization of priorities within the present or even a smaller budget may be implied. The only category where there was a strong feeling of excess spending was administration. This has importance for two reasons. First, it may simply reflect the respondents 'assimilation' of the popular bias against bureaucracy and its cost. Second, it may reflect the degree of ignorance associated with this category of expenditure. What is "administration"? Government cannot function without it but who knows how much less (more) we need to spend on it to make the public sector function well? It is so intangible (compared to roads and streets) that it is a logical target for anti-government feeling. It may be that people dislike government in the abstract but are less critical when it comes to precise programs and areas of spending.

Preferences, it was found, were related to one or more characteristics of the respondents. The use of factor analysis as a means of reducing the number of variables into meaningful groups, indicated that age and education were frequent significant explanations of fiscal preference orientation.

From the regression analysis of fiscal preferences, (both simple and linear probability model), a mixed pattern emerges. For local recreation and street expenditure there is a tendency to view these as excessive, the larger the place of residence although this is offset by large families who feel recreation expenditures is insufficient. This is interesting in light of the fact that in general, expenditure in this area is felt to be insufficient.

How do the results of this study compare to the analysis of fiscal preferences elsewhere. E. Mueller's study in the early nineteen sixties concluded that "...the data show that it is not true as it sometimes supposed, that upper income groups are less favorably disposed toward the extensions of government programs than lower incomes groups." (1963; 22) For specific programs, the pattern is somewhat mixed: there is more support for education spending as income rises; it declines with respect to health care and social welfare; it increases with respect to highway expenditure. For parks (comparable in part at least to recreation) support increases as income rises to a 'middle' income range than decreases.

In the Michigan study, age was a strong predictor of preference orientation for education and anti-pollution with urban size an important predictor of highway and public transportation spending. (Curtain and Cowan, 1973) There tended to be a negative correlation between federal spending and income although this was not true for all times.

Finally, the study by Deacon and Shapiro, (1975) which dealt with only two issues: public transit and conservation in specific referenda, came to the conclusion that income, education and urban density were important predictors of preferences for mass transit expenditure. In the case of the coastal conservation act, income and education were important.

This analysis of fiscal preferences in Ontario did not find income to be a very significant predictor. The closest comparison is with respect to provincial transportation expenditure where higher income respondents considered it an excessive share of the budget. Like Deacon and Shapiro, who drew the conclusion that older (as well as affluent) voters favoured expenditure on the environment, the present study established that older persons find anti-pollution expenditures to be inadequate. It must be remembered that the above-cited U. S. studies dealt with federal expenditure in two cases, and two specific referenda in the other. Consequently, not many comparisons can be made.

As noted earlier, the explanation of fiscal preferences is a mixed pattern and, at best, explains a very small portion of the variance in preferences. A logical extension of some of these findings is to determine, for example, why there is a tendency of people in large cities to view certain expenditures like recreation excessive. Since we found

higher incomes to be associated with views that spending is excessive in only two categories of spending (administration & local fire protection), it might suggest that the divergence between taxes paid and perceived public benefits does not widen substantially as income rises or that a sufficient number of upper income people are aware of the 'general welfare' aspects of certain public expenditures and thus support such spending. Alternatively, it is possible that fiscal incidence studies which do show an excess of taxes paid over benefits received as income rises, do not convey the appropriate picture concerning the redistributive impact of the budget. It may be that the method by which expenditures are allocated to income classes do not parallel the way benefits from expenditures are actually perceived.

The results of this analysis of knowledge and preferences raise several issues which are important for any future study of this nature. First, it might be useful in assessing what people know about the public sector, to ask questions about public spending as a share of GNP and what people believe to be the per capita or per family level of expenditure. Second, in gauging preferences, respondents could be given the per capita level of expenditure on provincial public goods and asked to indicate their feelings. To determine how preferences are determined respondents could be asked if their feeling about expenditure in a given category being insufficient or excessive was a result of what they were told by others, whether it was a failure/realization of expectations or the ability/inability to perceive direct benefits.

In conclusion, it is clear that these results have given us some additional insights into the perception of local and provincial

government in Ontario. How useful this information is depends on the user and it would be rather irrelevant for us to enter into a detailed discussion on this question. As suggested above, the results regarding awareness of the fiscal sector suggest that some preferences are based on very incomplete information. The revelation of preferences for specific categories however, does not suggest a broad-based dissatisfaction with the mix of public spending, and there appear to be only one group, older persons, who feel that public spending is excessive.

STATISTICAL APPENDIX A

The tables in this appendix are denoted alpha-numerically. The prefix A was used to separate text from appendix tables. The first number refers to the section of the paper and the second number, the specific table.

Table A^{3.1}

Do you have any idea how much the Ontario Government plans to spend in
1975-76?

(Percent response)

No = 87	Yes = 13		
		Percent of Yes	Percent of Sample
	Less than \$1B	12	1.5
	1 - 1.9	14	1.8
	2 - 3.9	21	2.6
	4 - 5.9	15	1.9
	6 - 7.9	10	1.3
	8 - 9.9	4	0.5
	10 plus	23	2.9

Table A3.2

Do You Have Any Idea What Percent Of The Ontario Budget Goes For Social Welfare Payments?

No = 81	Yes = 19		
		Percent or Yes	Percent of Sample
	0 - 5 percent	7.6	1.5
	6 - 10	13	2.6
	11 - 20	26	4.9
	21 - 30	28	5.4
	31 - 50	17	3.2
	50 plus	7.6	1.5

Table A3.3

Do You Have a Rough Idea What Percentage Of Ontario Government Spending
For Health?

No = 76	Yes = 24			
		Percent of Yes	Percent of Sample	
		Less than 5 percent	1.5	0.4
		5 - 10 "	19	4.6
		11 - 20 "	31	7.5
		21 - 30 "	33	8.0
		31 - 40 "	9.2	2.2
		41 - 50 "	3.4	0.9
		51 - 70 "	2.5	0.6
		70 plus "	.6	0.2

Table A3.4

Do You Have a Rough Idea What Percent Of Ontario Government Spending Goes
For Education?

No = 71	Yes = 29		
		Percent of Yes	Percent of Sample
	Less than 5 percent	0	0
	5 - 10 "	3.7	2.2
	11 - 20 "	20	6.0
	21 - 30 "	25	7.3
	31 - 40 "	23	6.6
	41 - 50 "	13	3.8
	51 - 70 "	8.7	2.6
	70 plus "	2.9	0.9

Table A3.5

Do You Have a Rough Idea What Percentage of Local Spending is Financed By
the Property Tax?

No = 83	Yes = 13			
		Percent of Yes	Percent of Sample	
		5 - 10 percent	14	2.4
		11 - 20 "	14	2.3
		21 - 30 "	19	3.3
		31 - 40 "	14	2.3
		41 - 50 "	16	2.7
		51 - 70 "	14	2.5
		71 - 90 "	10	1.8

Table A3.6

How Do You Feel About Expenditure on the Following Municipal Goods (Given you were not in general, completely satisfied in the previous question)?

	Too Much	Too Little	Just Right	Mean Score	N.O.
	<u>%</u>	<u>%</u>	<u>%</u>		<u>%</u>
Streets and Roads	13	46	32	-.360 (.522)*	8
Recreation	10	40	39	-.330 (.453)	10
Police Protection	6	24	60	-.201 (.303)	10
Fire Protection	3	16	70	-.149 (.186)	12
Education (Primary & Secondary)	31	14	44	+.186 (.475)	10
Administration	52	3	24	+0.615 (.323)	21

N.O. = No Opinion

*Standard deviation

Table A3.7

How Do You Feel About Expenditure at the Provincial Level on the Following
Areas?

	<u>Too Much</u>	<u>Too Little</u>	<u>Just Right</u>	<u>Score</u>	<u>N.O.</u>
	<u>%</u>	<u>%</u>	<u>%</u>		<u>%</u>
Community College	20	17	31	.048 (.541) *	31
University	22	19	30	.038 (.581)	29
Anti-Pollution	7	45	22	-.507 (.445)	25
Health	7	24	50	-.205 (.346)	19
Highways	16	16	51	-.001 (.389)	17
Housing	9	41	29	-.399 (.480)	21
Provincial Police	4	17	56	-.169 (.244)	23
Administration	48	2	23	+.620 (.304)	27

N.O - No opinion

*Standard deviation

Table A3.8

Given The Breakdown of Provincial Expenditures As Shown Above, How Do You
Feel About The Following?

	<u>Too Much</u>	<u>Too Little</u>	<u>Just Right</u>	<u>Score</u>	<u>N.O.</u>
	<u>%</u>	<u>%</u>	<u>%</u>		<u>%</u>
Health	14	13	63	.015 (.306)*	10
Education	18	20	51	-.025 (.432)	10
College & University	15	25	45	-.118 (.460)	14
Social & Community Service	15	23	48	-.096 (.437)	14
Transportation	14	16	56	-.026 (.350)	14
Transfer to Local Government	14	16	46	-.027 (.393)	24
Other (including administration)	35	5	37	+.396 (.363)	22

N.O. - No Opinion

*Standard deviation

TABLE A5.1

FACTOR ANALYSIS ON FISCAL PREFERENCE

VARIABLES: LOCAL AND PROVINCIAL EXPENDITRE

<u>Variable</u>	<u>FACTOR 1</u>	<u>FACTOR 2</u>	<u>FACTOR 3</u>	<u>FACTOR 4</u>	<u>FACTOR 5</u>	<u>FACTOR 6</u>
156 Social welfare(provincial)	.098	.042	.054	-.082	-.695	.051
162 Streets (local)	.001	.032	-.016	.601	.099	.067
163 Recreation (local)	-.093	.009	-.029	.147	-.159	.187
164 Police (local)	.181	-.896	.014	-.003	-.114	-.054
165 Fire protection (local)	-.248	-.358	-.071	.090	-.030	-.116
166 Education (local)	-.245	-.029	.007	.045	-.515	-.032
167 Administration (local)	-.024	-.011	.664	.073	-.047	-.029
168 Community college	-.832	.049	.039	.012	-.020	.018
169 Universities	-.674	.018	.081	-.079	-.037	.121
170 Anti-pollution(provincial)	-.038	-.046	.079	-.039	-.053	.382
171 Health (provincial)	-.067	-.098	-.031	.064	-.332	.124
172 Highways (provincial)	.058	-.027	.101	.559	-.063	-.038
173 Housing (provincial)	-.024	-.007	-.096	.099	-.032	.441
174 Provincial police (provincial)	-.018	-.600	.025	-.044	-.154	.203
175 Administration (provincial)	-.045	.003	.726	.013	-.035	.015

TABLE A5.2

Factor Analysis when variables 192-202 are substituted for
168-175

Variable	FACTOR 1 *	FACTOR 2 *	FACTOR 3 *	FACTOR 4 *	FACTOR 5 *
156 Social Welfare(provincial)	.078	-.021	-.801	1.012	-.077
162 Streets (local)	.081	.058	.078	-.231	.264
163 Recreation (local)	.038	-.078	-.143	-.041	.453
164 Police (local)	-.131	-.029	-.085	.001	-.035
165 Fire protection (local)	.116	-.037	.081	-.049	.042
166 Education (local)	.574	.443	-.215	.062	.059
167 Administration (local)	.159	.146	-.050	.104	.030
196 Health (provincial)	.092	.040	-.270	.125	-.013
197 Education (provincial)	.757	1.004	.001	-.122	.020
198 Com. Coll. & Univ.	.582	.415	.012	.161	-.017
199 Soc/Comm. Serv.	-.041	.080	-.437	.308	.410
200 Transportation	-.046	-.024	-.009	.033	.310
201 Transfer to local gov't	-.046	-.001	.036	.025	.222
202 Other	-.009	.029	.002	.116	-.046

* The second column is the results of using responses of respondents who earned income in 1974. They are not shown for Table 4.1 because there was no difference in the relative factor loadings for the two sets.

** Variables 196-202 are those used when respondent was given a breakdown of provincial spending in 1974.

TABLE A6.1

LINEAR REGRESSIONS OF PREFERENCES FOR LOCAL SPENDING

BY RESPONDENT CHARACTERISTICS: ALL SAMPLE

Local Spending On:		Urban Group	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Streets & Roads	162	.108 (.026)	.234	.041 (.038)	.066							.07
Recreation	163	.051 (.025)	.115			-.076 (.025)	-.167	.069 (.042)	.089			.07
Police	164					.024 (.021)	.070	-.078 (.036)	.123			.03
Fire	165	.018 (.016)	.064	.053 (.024)	.136							.04
Local Education	166	-.029 (.026)	.065			-.029 (.025)	.064	.147 (.044)	.192			.07
Administration	167	.073 (.023)	.193	.075 (.034)	.147							.09

Standard errors are in brackets below estimated regression coefficient

* Standardized partial correlation coefficient

TABLE A6.2

LINEAR REGRESSIONS OF PREFERENCES FOR PROVINCIAL SPENDING

ON RESPONDENT CHARACTERISTICS: ALL SAMPLE

Provincial Expenditure On:	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	R^2
Community College	168	-.049 (.019)	.104	.034 (.026)	.055	-.043 (.018)	.091	.202 (.030)	.269	.024 (.016)	.10
Universities	169	-.037 (.020)	.073	.040 (.027)	.063	-.039 (.019)	.079	.137 (.031)	.175		.07
Anti-Pollution	170	-.016 (.015)	.039				-.069 (.027)	-.105			.10
Health	171						.068 (.022)	.115	.043 (.012)	.146	.04
Highways	172	.066 (.015)	.165				.040 (.024)	.062	.016 (.012)	.050	.04
Housing	173	-.036 (.017)	-.081	.030 (.023)	.053		.043 (.027)	.061			.03
Provincial Police	174	-.029 (.012)	-.094	.028 (.017)	.069		-.057 (.019)	-.116			.03
Administration	175	.026 (.014)	.075	.045 (.019)	.096		.039 (.022)	.070	.058 (.011)	.200	.09

*Standardized partial correlation coefficient

TABLE A6.3

LINEAR REGRESSIONS OF PREFERENCES FOR PROVINCIAL SPENDING ON

RESPONDENT CHARACTERISTICS: ALL SAMPLE

(RESPONDENTS AWARE OF BREAKDOWN OF EXPENDITURES)

Share of Provincial Expenditure On:		Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Health	196			-.026 (.017)	.055	.017 (.012)	.049			-.026 (.010)	.092	.02
Education	197	.032 (.015)	.077					-.149 (.023)	.223			.06
University & Community College	198	.027 (.015)	.062	-.031 (.021)	.056			-.098 (.025)	.142			.07
Social & Community Services	199					-.028 (.015)	.067	-.070 (.025)	.104			.01
Transportation	200	-.043 (.014)	-.115	.069 (.019)	.137				.066	-.027 (.011)	.087	.04
Transfer to Local Government	201					.017 (.015)	.044	.042 (.025)	.065			.02
Other (includes Administration)	202			-.045 (.020)	.091	-.019 (.014)	.050			-.029 (.012)	.095	.03

*Standardized partial correlation coefficients

TABLE A6.4

LINEAR REGRESSIONS OF PREFERENCES FOR LOCAL SPENDING:

RESPONDENTS NOT RECEIVING INCOME IN 1974

Local Expenditure On:		Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Streets & Roads	162									-.082 (.065)	-.225	.06
Recreation	163					-.100 (.079)	.194	.253 (.118)	.330			.12
Police	164	-.092 (.042)	-.251			.115 (.057)	.315			-.074 (.044)	-.278	.20
Fire	165											.06
Education	166	.081 (.067)	.176					.213 (.114)	.304			.13
Administration	167	.112 (.065)	.261							-.111 (.047)	.362	.07

*Standardized partial correlation coefficient

TABLE A6.5

LINEAR REGRESSIONS OF PREFERENCES FOR PROVINCIAL SPENDING:

RESPONDENTS WHO DID NOT RECEIVE INCOME IN 1974

Provincial Expenditure On:	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Community Colleges	168						.253 (.065)	.401			.10
Universities	169						.193 (.066)	.293	-.043 (.035)	.110	.13
Anti-Pollution	170						.074 (.054)	.136			.04
Health	171				.053 (.033)	.151	.187 (.047)	.378			.09
Highways	172				.072 (.038)	.178	.107 (.056)	.184	.058 (.031)	.173	.09
Housing	173				-.070 (.037)	-.180	.156 (.057)	.272			.06
Provincial Police	174	-.087 (.025)	.274		-.038 (.029)	.211	-.059 (.044)	-.130			.12
Administration	175						.122 (.055)	.224	.124 (.030)	.391	.19

*Standardized partial correlation coefficient

TABLE A6.6

LINEAR REGRESSIONS OF PREFERENCES FOR PROVINCIAL SPENDING WITH
RESPONDENTS AWARE OF BUDGET BREAKDOWN: NON-INCOME RESPONDENTS

Share of Provincial Expenditure On:	196	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Health	196											
Education	197	.048 (.029)	.118		.096	.039 (.034)		-.118 (.049)	.207	-.032 (.024)	-.107	.02
University & Community Colleges	198	.033 (.030)	.082					-.165 (.050)	.300			.10
Social & Community Services	199	.056 (.031)	.138					-.098 (.054)	.171	.059 (.029)	.176	.06
Transportation	200	-.035 (.029)	.091		-.162	-.063 (.034)		.050 (.047)	.094	-.060 (.027)	-.184	.13
Transfer to Local Government	201											
Other (including administration)	202				.186	-.067 (.035)		-.069 (.049)	.132	-.057 (.027)	-.189	.10

* See Table A6.5

TABLE A6.7

LINEAR REGRESSIONS OF PREFERENCES FOR LOCAL PUBLIC SPENDING
ON RESPONDENT CHARACTERISTICS: INCOME RECIPIENTS

Local Expenditure On:	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	\bar{R}^2
Streets & Roads	162	.123 (.034)	.262								.06
Recreation	163	.049 (.034)	.108		-.035 (.032)	-.077					.04
Police	164						-.088 (.046)	-.142			.04
Fire	165	.041 (.022)	.135		.034 (.022)	.107			-.032 (.019)	.134	.06
Education	166						.146 (.054)	.199			.06
Administration	167	.076 (.027)	.210	.052 (.041)	.108				.031 (.023)	.106	.10

* See Table A6.5

TABLE A6.8

LINEAR REGRESSIONS OF PREFERENCES FOR PROVINCIAL PUBLIC EXPENDITURE

ON CHARACTERISTICS OF RESPONDENTS: INCOME RECIPIENTS

Provincial Expenditure On:	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	$\frac{-2}{R}$
Community College	168	-.029 (.026)	.060		-.035 (.025)	.070	.233 (.042)	.285	.033 (.021)	.084	.09
Universities	169				-.042 (.027)	.079	.133 (.044)	.159			.05
Anti-Pollution	170								.028 (.019)	.076	.01
Health	171						-.036 (.031)	.058	.062 (.015)	.200	.04
Highways	172	.067 (.021)	.165								.04
Housing	173	-.046 (.023)	.102	.078	-.033 (.022)	.074	.040 (.037)	.054			.04
Provincial Police	174				.025 (.016)	.076	-.076 (.027)	.147			.04
Administration	175	.031 (.019)	.089	.070	.032 (.025)		.059 (.029)	.106	.040 (.015)	.139	.07

* See Table A6.5

TABLE A6.9

LINEAR REGRESSIONS BASED ON PREFERENCE SCORES FOR PROVINCIAL EXPENDITURE

AND RESPONDENT CHARACTERISTICS (RESPONDENT ARE GIVEN BREAKDOWN OF

EXPENDITURE): INCOME RECIPIENTS

Share of Provincial Expenditure On:	Urban Size	*	Income	*	Family Size	*	Age	*	Education	*	R^2
Health	196										
Education	197	.024 (.021)	.054		-.039 (.017)	.071	-.155 (.033)	.215	-.031 (.015)	.064	0.03
College/University	198										
				-.036 (.031)	.061		-.088 (.035)	.119			0.03
Social & Community Service	199			.044 (.032)	.073	.048	-.074 (.035)	.101			0.02
Transportation	200	-.035 (.020)	.089	.069 (.028)	.129						0.03
Transfer to Local Government	201			-.086 (.032)	.151	.065	.081 (.035)	.117			.04
Other (including Administration)	202								-.019 (.016)	.058	.01

* See Table A6.5

TABLE A6.10
LINEAR PROBABILITY REGRESSION: PROBABILITY THAT EXPENDITURE

IS INSUFFICIENT

Local Expenditure On:		Urban Size *	Income *	Family Size *	Age *	Education *	\bar{R}^2
Streets & Roads	162	-.076 (.018)		-.235			.07
Recreation	163	-.022 (-.018)		-.067	-.058 (.031)	-.102	.04
Police	164	.024 (.017)	-.044 (.024)	-.114	.071 (.028)	.139	.04
Fire	165		-.062 (.022)	-.181		-.016 (.012)	.07
Education	166	.024 (.013)		.101	-.057 (.023)	.019 (.011)	.04
Administration	167	-.017 (.008)		-.131			.02

* See Table A6.5

TABLE A6.11
(CONTINUATION OF A6.10 FOR PROVINCIAL SPENDING)

Provincial Spending On:		Urban Size *	Income *	Family Size *	Age *	Education *	\bar{R}^2
Community Colleges	168	0.34 (.011)	-.020 (.015)	.023 (.011)	-.113 (.018)	-.248	.08
Universities	169	.019 (.012)		.023 (.011)	-.065 (.019)	-.140	.05
Anti-Pollution	170	.018 (.012)			-.080 (.020)	.161	.03
Health	171				-.053 (.018)	-.022 (.009)	.02
Highways	172	-.044 (.010)			-.036 (.016)	-.083	.04
Housing	173	.043 (.012)		.014 (.011)	-.037 (.019)	-.072	.03
Provincial Police	174	.038 (.010)	-.044 (.014)		.036 (.016)	.088	.04
Administration	175			-.011 (.004)	-.020 (.007)	-.008 (.004)	.02

*See Table A6,5

TABLE A6.12

LINEAR PROBABILITY REGRESSIONS: PROBABILITY THAT EXPENDITURE
IS FELT TO BE EXCESSIVE. (LOCAL SPENDING)

Local Spending On:		Urban Size	Income	Family Size	Age	Education	\bar{R}^2
		*	*	*	*	*	
Streets	162	.032 (.012)	.146				.03
Recreation	163	.029 (.012)	.136	-.045 (.012)	-.202		.08
Police	164		-.027 (.014)	-.120			.02
Fire	165						
Education	166		.035 (.026)	.085	+.090 (.030)	.169	.07
Administration	167	.056 (.019)	.174	.171			.10

* See A6.5

TABLE A6.13

(CONTINUATION OF A6.12: FOR PROVINCIAL SPENDING)

Provincial Spending on:	Urban Size *	Income	Family Size *	Age	Education *	\bar{R}^2
Community Colleges	168 -.014 (.011)	-.052	-.021 (.011)	.089 (.018)	.015 (.009)	.06
Universities	169 -.017 (.012)	.074	.028 (.016)	.071 (.018)	.156	.04
Anti-Pollution	170					.02
Health	171		.008 (.006)	.014 (.010)	.054 (.005)	.03
Highways	172 .022 (.009)	.090				.01
Housing	173					.01
Provincial Police	174	-.015 (.008)	-.078	-.021 (.009)	-.098	.02
Administration	175 .030 (.012)	.097	.038 (.016)	.095	.049 (.010)	.10

*See A6.5

A P P E N D I X B

1. The amount of expenditure by government has increased rapidly over the past few years and very few people are aware of what is being spent. Do you have any idea how much the Ontario Government plans to spend in 1975 - 1976?

No 1

Yes (how much?)

 ↓

less than 1 billion. 2

\$1 - 1.9 billion 3

2 - 3.9 billion 4

4 - 5.9 billion 5

6 - 7.9 billion 6

8 - 9.9 billion 7

over 10 billion 8

2. Over the past few years, social welfare payments have become an important part of provincial government expenditure.

- (a) Do you have any idea what percent of the Ontario provincial budget goes for social welfare payments?

No (GO TO Q.3) 1

Yes (What percent?)

 ↓

0 - 5 percent 2

6 - 10 percent 3

11 - 20 percent 4

21 - 30 percent 5

31 - 50 percent 6

over 50 percent 7

- (b) Do you feel that this is...

... too much. 1

... too little. 2

... about right 3

... D.K.. 8

IF R. ANSWERED 11 - 20 PERCENT IN Q.2a, GO TO Q.3

- (c) In actual fact, the percentage is 11 - 20%. Does this change your view expressed before in Q.2b?

No 1

Yes. . (what would your response be?)

 ↓

...too little 2

...too much 3

...just right 4

3. a) Would you have a rough idea of what percent of Ontario government spending goes for health? (CODE UNDER 'a' HEALTH)

b) What about education? (CODE UNDER 'b' EDUCATION)

	a. <u>Health</u>	b. <u>Education</u>
	158	159
No.	1	1
Yes (what percent?)		
Less than 5 percent.	2	2
5 - 10 percent	3	3
11 - 20 percent	4	4
21 - 30 percent	5	5
31 - 40 percent	6	6
41 - 50 percent	7	7
51 - 70 percent	8	8
Over 70 percent	9	9

4. Only part of the total spending by your own city, town, county or region is financed by local property taxes. The amount varies from one locality to another. Do you have any idea what percent of local spending is paid for by the property tax?

No	1
Yes (What percent?)	
5 - 10 percent.	2
11 - 20 percent.	3
21 - 30 percent.	4
31 - 40 percent.	5
41 - 50 percent.	6
51 - 70 percent.	7
71 - 90 percent.	8

5. (a) Do you feel you are 'getting your money's worth' for the local property taxes you pay as a renter or homeowner?

- Definitely yes (GO TO Q.6) 1
- Not completely satisfied. 2
- Don't think so. 3
- Definitely no 4
- D.K. (GO TO Q.6). 8

(b) Do you feel there is too much or too little spent on...

	<u>Too Much</u>	<u>Too Little</u>	<u>Just Right</u>	<u>Don't Know/ No Opinion</u>
a...municipal streets & roads 1		2	3	8
b...recreation 1		2	3	8
c...police protection. 1		2	3	8
d...fire protection. 1		2	3	8
e...education (primary & secondary). 1		2	3	8
f...administration 1		2	3	8

In terms of provincial expenditure, do you feel there is too much or too little spent on ...

	<u>Too Much</u>	<u>Too Little</u>	<u>Just Right</u>	<u>Don't Know/ No Opinion</u>
a...community colleges. 1		2	3	8
b...universities. 1		2	3	8
c...anti-pollution. 1		2	3	8
d...health. 1		2	3	8
e...highways. 1		2	3	8
f...housing 1		2	3	8
g...provincial police 1		2	3	8
h...administration. 1		2	3	8

7. How would you judge your understanding of the financial relationship between the Ontario provincial government and local government? Do you...

- ...understand it well? 1
- ...moderately. 2
- ... only a little. 3
- ... not at all 4

8.(a) Do you think government spending at the provincial level has contributed to the overall increase in standard of living?

- Yes 1
- No. 2
- D.K.. 8

(b) Do you think government spending at the local level has contributed to the overall increase in standard of living?

- Yes 1
- No. 2
- D.K.. 8

9. Now a few background questions: Since 1970, have you always lived in Ontario (for the most part)?

- Yes 1
- No (since when?) 1971. 2
- 1972. 3
- 1973. 4
- 1974. 5

(HAND R. CARD C)

10. Would you please look at this card and tell me which figure comes closest to the registrant's total income, that is, income for the past year - before taxes and deductions. Just tell me the letter next to the figures that fit it best. (CODE UNDER 'a' BELOW)

- b) Which figure comes closest to spouse's total income? (CODE UNDER 'b' BELOW)

- c) Code total "OHIP family" income under 'c'.

	<u>a.</u> <u>Registrant</u>	<u>b.</u> <u>Spouse</u>	<u>c.</u> <u>OHIP "Family"</u>
A NO INCOME AT ALL	01	01	01
B Less than \$ 1999.	02	02	02
C \$ 2000 - \$ 2999.	03	03	03
D \$ 3000 - \$ 3999.	04	04	04
E \$ 4000 - \$ 4999.	05	05	05
F \$ 5000 - \$ 5999.	06	06	06
G \$ 6000 - \$ 6999.	07	07	07
H \$ 7000 - \$ 7999.	08	08	08
I \$ 8000 - \$ 8999.	09	09	09
J \$ 9000 - \$ 9999.	10	10	10
K \$10000 - \$13999.	11	11	11
L \$14000 - \$19999.	12	12	12
M \$20000 - \$25000.	13	13	13
N Over \$25,000	14	14	14

ASK Q.12a ABOUT REGISTRANT

11. (a) What is the highest level of education that registrant has completed? (CODE UNDER 'a' BELOW)

- (b) What is the highest level of education that the spouse has completed? (CODE UNDER 'b' BELOW)

	<u>a</u> <u>Registrant</u>	<u>b</u> <u>Spouse</u>
Primary School (no Graduation/Certificate) . . .	1	1
Primary School (with Graduation/Certificate) . .	2	2
High School (no Graduation/Certificate) . . .	3	3
High School (with Graduation/Certificate) . . .	4	4
Technical training beyond secondary school. . .	5	5
Some college or university.	6	6
University degree or beyond	7	7
DK.	8	8

(IF RESP. HAD NO INCOME IN 1974, GO TO Q.17.

OTHERS ASK:)

12.a) Did you yourself pay any income tax in 1974?

Yes 1
No (GO TO Q.15) 2

b) How much income tax? \$ _____

13. How much of your total personal income tax goes to the Ontario Government?

\$ _____ or _____ %
DK 99998

14. How much do you think you personally paid in Ontario sales tax last year?

under \$200 01
\$201. - \$400. 02
\$401. - \$600. 03
\$601. - \$800. 04
\$801. - \$1000 05
\$1001. - \$1200. 06
\$1201. - \$1500. 07
over \$1500. 08
DK. 98

15. Do you feel that you are "getting your money's worth" for the provincial taxes you pay?

Yes. 1
No 2
DK 8

(HAND R. CARD D)

16. The recent provincial budget shows the following breakdown of how each tax dollar was spent.

Health: 28¢

Education: (to school boards for primary and secondary) 17¢

Colleges & Universities: 10¢

Social and Community Services 8.5¢

Transportation and Communication 9.5¢

Transfers to local government: 13¢

Other: General administration, interest
on government debt etc.) 14¢

What is your feeling about how each tax dollar is spent as far as...

	<u>Too Little</u>	<u>Too Much</u>	<u>Just Right</u>	<u>DK</u>
196 ...health.	1	2	3	8
197 ...education	1	2	3	8
198 ...colleges & universities .	1	2	3	8
199 ...social & community serv- ices. 1	1	2	3	8
200 ...transportation.	1	2	3	8
201 ...transfers to local gov- ernment . . 1	1	2	3	8
202 ...other	1	2	3	8

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FISCAL KNOWLEDGE AND PREFERENCES IN ONTARIO, -- A working paper by
D.A.L. Auld, prepared for the Ontario Economic Council.

Toronto, July 12 -- Most Ontario citizens have a vague perception of what they are getting for their tax dollars, and only those who are willing to make a real investment of time and effort have any input in determining fiscal spending, according to a report released today by the Ontario Economic Council. In a study of Fiscal Knowledge and Preferences in Ontario, D.A.L. Auld of the University of Guelph says more public education on government fiscal policies is essential for a healthy process of budget determination.

"Since government has become a very pervasive force in our society, spreading its tentacles into many aspects of our economic and social life, it is imperative that we know everything we can about the interaction between individual citizens and the public sector," says Auld. Because citizens have to pay their taxes without any regard for their preferences (except, possibly, in the area of excise taxes), they have little incentive to 'shop around' for a suitable mix of public goods, as they do when buying goods and services privately, he reports. The questions he then poses are: how much do public preferences influence public expenditures? Are government budgets influenced by what the public wants?

In a detailed statistical analysis, based on a survey conducted by the Institute for Behavioural Research at York University, Toronto, Auld examines how such factors as age, income and personal characteristics dictate preferences concerning expenditures in the fields of health, education, social and community services, transportation and communications, local government, general administration and government debt. The surveys dealt with both local and provincial government expenditures in Ontario.

Lower income respondents substantially over-estimated the amount of their income taxes, whereas those in higher income brackets equally under-estimated theirs. Only middle-income respondents closely estimated their tax burden. On balance, there is a general feeling that local governments do not budget enough for streets, recreation and the protection of property and persons, and too much for local education and administration. In the provincial field, respondents feel strongly that more money should go for anti-pollution measures and housing; less strongly, that health and provincial policy need more funding. While they agree that too much money is also being spent on administration provincially, they think that funding for highways, community colleges and universities is about right.

When asked if they felt they were getting 'fair value' for their tax dollar, respondents indicated slightly more satisfaction with local than provincial spending. However, Auld points out that this might result from provincial grant structures which subsidize local benefits, making them appear to be better 'bargains.' Respondents generally felt that provincial spending contributes more to their overall standard of living than do local budgets, but by a slim margin. Overall, there appears to be only one group, older persons, who feel that public spending is excessive.

Since there is little incentive for individuals to seek out information about such issues as intergovernmental fiscal relations and budget shares, Auld says people tend to make their decisions on what they perceive rather than what is actually true. More information could improve this situation, he points out, and such information could be provided through educational facilities or by the government itself through the electronic media.

In the face of arguments that public advertising is a waste of taxpayers' money and politically unfair to opposition parties, Auld claims that effective safeguards could be established to prevent distortion and dissemination of misleading information. "To do nothing about this problem of limited knowledge is to condone a situation which is not exactly healthy for the process of budget determination," he concludes.

Auld's study is one of a series of working papers and research reports prepared by various authors under the auspices of the Ontario Economic Council. The Council is an autonomous body whose purpose is to assist in the development and awareness of public policy through research and sponsorship of conferences.

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Note: Author's biographical note attached
Selected quotes attached

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Douglas Auld received his B.A. at the University of Western Ontario in 1964 and his Ph.D at the Australian National University in 1968. He was Visiting Scholar at York University (1973) and Visiting Professor at Duke University (1976). At present, he is Professor of Economics and Acting Chairman, Department of Economics, University of Guelph. Professor Auld has published numerous papers in academic journals and is editor or author of seven books, He also holds the post of Associate Editor, Canadian Public Policy and is a member of the executive of the Canadian Economics Association.

SOME SELECTED QUOTES

1. (Page 11) "Individuals can have an impact on the size and mix of the budget through voting for candidates, parties, referenda in accordance with their preferences.... Since the cost of political activity may be high in terms of foregone income or leisure, the 'coercion threshold' may have to be substantial; mild dissatisfaction will not provoke political activity."

2. (Page 12) "There may be a good deal of agreement about having a new public program - provided it is financed by a particular tax. To introduce and pay for the program in the manner suggested by the preferences of, let us say, the majority, is knowledge that is not easy to come by. With respect to paying for a given program, the vote-reduction aspect is as varied as there are ways of financing it. Because this may well be the critical element in the decision to go ahead with a program, considerable information on voter preference towards taxation and borrowing will be required.... How this information is obtained is, of course, part of politics."

3. (Page 14) "One of the jobs of a politician is to represent the feelings of his constituents in parliament concerning fiscal measures. Politicians also carefully assess the strength and scope of preferences as they are revealed through the media, political pressure groups and economic/social organizations. ...One of the objectives in policy-making is to devise programs that have at least some common denominator that will appeal to a wide citizenry ... the overall expenditure/tax package (and the mix therein) must not exclude an item which may have only narrow appeal but where there are very strong preferences."

4. (Page 15) "There is good reason to suspect that preferences are potentially more dependent today than in previous times on 'expert' information about public spending, taxation and its composition. We include the word 'potential' because the actual acceptance of the extraneous information is likely to depend on the credibility of the person/agency dispensing the information and/or the logic underlying the arguments. A well-reasoned editorial in The Globe and Mail arguing against free post-secondary education is likely to carry more 'preference generating' weight than an advertisement sponsored by an unknown organization stating that free education is morally wrong or bad."

5. (Page 54) "For provincial expenditure ... the following general observations can be made: (a) Age dominates as a negative predictor of the probability that higher education spending is insufficient; (b) Education and age dominate in the case of health expenditure preferences; (c) Urban size is the dominant predictor (in a positive direction) for the probability of insufficient highway expenditure, as it does for housing as well; (d) In the case of provincial police, urban size and income dominate as predictors of the probability that expenditure is excessive, but in opposite directions."

6. (Page 57) "In the case of the absolute size of the budget, it probably makes little difference whether people think it is \$8B or \$10B. Figures of these magnitudes are likely to mean very little to most persons. In terms of public debate concerning the size of the public sector, it would probably be more appropriate to consider the growth of the budget over time or the ratio of public spending to some benchmark such as gross national product. When it comes to budget shares covering major categories of spending such as health, education and social welfare, it becomes more important that people be aware of what these shares are if they are to meaningfully evaluate discussion and proposals for changing priorities in government spending. Knowledge concerning the extent to which local public spending is financed by the provincial government is also important. Without a basic understanding of what the fiscal relationship is, it is virtually impossible to realistically evaluate the tax price one pays for local goods."

7. (Page 62) "It is clear that these results have given us some additional insight into the perception of local and provincial government in Ontario. How useful this information is depends on the user, and it would be rather irrelevant for us to enter into a detailed discussion on this question The results regarding awareness of the fiscal sector suggest that some preferences are based on very incomplete information. The revelation of preferences for specific categories however does not suggest a broad-based dissatisfaction with the mix of public spending, and there appears to be only one group, older persons, who feel that public spending is excessive."

